

# Network Statement for A-Train

Annual Timetable 2025

A-Train AB

**TABLE OF CONTENTS**

1	GENERAL INFORMATION .....	7
1.1	Introduction .....	7
1.2	A-Train's Organisation and Activities .....	7
1.3	Period of Validity .....	7
1.4	Publication .....	7
1.5	Consultations .....	8
1.6	Co-Operation between Infrastructure Managers .....	8
1.7	Implementation .....	8
1.8	Appeals.....	8
1.9	Contact .....	8
2	ACCESS AND TRAFFIC CONDITIONS .....	9
2.1	Introduction .....	9
2.2	General Access Conditions .....	9
2.3	Permits .....	9
2.4	General Business Conditions .....	9
2.4.1	Framework Agreements .....	9
2.4.2	Traffic Access Agreements .....	10
2.4.3	Charges .....	10
2.5	Operational Regulations .....	10
2.5.1	Regulations on Electrical Safety.....	10
2.5.2	Other Regulations.....	10
2.5.3	Driver's Orders.....	11
2.6	Railway Vehicles.....	11
2.7	Test Runs .....	11
2.8	Exceptional Transport .....	11
2.9	Responsibility.....	12
2.9.1	Liability in Case of Delays .....	12
2.9.2	Liability for Damage.....	12
2.9.3	Contributing to Damage.....	12
2.9.4	Amount of Compensation .....	12
2.9.5	Responsibility towards Third Parties .....	12
3	INFORMATION ON INFRASTRUCTURE .....	14
3.1	Introduction .....	14
3.2	Description of the Infrastructure .....	14
3.2.1	Turnstiles for tickets .....	14
3.2.2	Blackvreten Train Service Centre .....	14
3.2.3	Connecting Railway Network.....	14
3.3	Capacity and Technical Characteristics of the Infrastructure .....	15
3.3.1	Capacity Characteristics of the Infrastructure.....	15
3.3.2	Skavstaby - Arlanda North .....	15
3.3.3	Arlanda Central - Myrbacken.....	17
3.3.4	Tracks 1 and 2 Stockholm Central .....	18
3.3.5	Planned Infrastructure Changes.....	19
3.4	Traffic Restrictions .....	19
3.4.1	Freight Traffic.....	19
3.4.2	Loading Gauge .....	19
3.5	Maintenance and Service Facilities .....	19

3.6	Planned Engineering Works.....	19
4	CAPACITY ALLOCATION .....	20
4.1	General.....	20
4.2	Application for Train Path Capacity .....	20
4.2.1	Requirements for Applicants .....	20
4.2.2	Application for the Adoption of the Annual Timetable .....	20
4.2.3	Application for ad hoc Capacity.....	20
4.3	Path Allocation Process .....	20
4.3.1	Dispute Resolution.....	20
4.3.2	Congested Infrastructure .....	21
4.3.3	Established Annual Timetable .....	21
4.3.4	Allocated Train Paths .....	21
4.3.5	Measures in Case of Disturbances .....	21
4.4	Capacity for Maintenance Work .....	22
4.5	Clearing, Salvage and Rescue Operations .....	22
5	SERVICES .....	23
5.1	General.....	23
5.2	Train Path Allocation Services .....	23
5.3	Ancillary services.....	23
6	CHARGES.....	24
6.1	Charging Principles.....	24
6.2	Track Charge.....	24
6.3	Station Charge.....	24
6.4	Delay and Cancellation Charges .....	25
6.5	Change of Charge .....	25
6.6	Debiting .....	25
6.7	Traction Current.....	25
6.8	GSM-R .....	25
7	SAFETY IN THE ARLANDA TUNNELS.....	26
7.1	General.....	26
7.2	Security.....	26
7.3	Security and Communication Equipment.....	26
7.4	Evacuation routes .....	27
8	ANNEXES .....	29
	ANNEX 1 - CONTACT DETAILS .....	30
	ANNEX 2 - OPERATIONAL FRAMEWORK.....	31
	ANNEX 3 - SAFETY OF ACTIVITIES IN THE RAILWAY AREA.....	32
	ANNEX 4 - OPERATION OF RAILWAY VEHICLES ON THE ARLANDA LINK.....	34
	ANNEX 5A - MAP OF THE RAILWAY SYSTEM.....	35
	ANNEX 5B - SCHEMATIC MAP OF PART OF THE RAILWAY SYSTEM.....	36
	ANNEX 6 - CURRENT LOADING GAUGE .....	37
	ANNEX 7 - PLANNED MAJOR ENGINEERING WORKS.....	38
	ANNEX 8 - PRIORITY CRITERIA.....	39
	ANNEX 9 - SERVICE FACILITY DESCRIPTION .....	40

## Definitions and abbreviations

**AIAB:** refers to Arlandabanan Infrastruktur AB.

**Annual Timetable:** A plan of all Train Paths during a certain specified period.

**Arlanda Link:** The infrastructure in the form of a railway managed by A-Train on the route between Skavstaby and Myrbacken with associated Halts via Arlanda Airport.

**ATC:** Automatic Train Control, which refers to the train protection system that monitors the progress of the train according to the technical driving authorisation given by the railway signalling system.

**A-Train:** refers to A-Train AB.

**Capacity Allocation:** Allocation of infrastructure capacity.

**Clearance:** Measures, where appropriate after the completion of Rescue operations, to remove obstacles to make the track passable after an accident or breakdown.

**Commuters:** All Railway Undertakings' passengers to and from the Halts on Arlanda Link who have bought a Period Ticket.

**Concessionary Passenger Traffic:** The passenger traffic operated in accordance with a concession granted by Arlandabanan Infrastruktur AB including a right and an obligation for A-Train to maintain a certain traffic.

**Exceptional Transport:** Transport that exceeds any technical standard of the track system and that may be carried out under certain conditions decided by A-Train.

**Framework Agreement:** Agreements between an Infrastructure Manager and a Railway Undertaking or other applicant concerning the terms and conditions of operation on a Railway Network, for a period longer than a Annual Timetable.

**Halts:** Halts where trains stop to drop off or pick up passengers. Within the Arlanda operating site area there are Halts at Arlanda Central, Arlanda South and Arlanda North.

**Infrastructure Manager:** The person who manages the Railway Infrastructure and operates the facilities associated with the infrastructure.

**International Passenger Traffic:** Passenger transport between different States of the EEA and Switzerland by trains all of whose carriages cross at least one national border and whose main purpose is to carry passengers between stations in different States of the EEA and Switzerland.

**OMC:** A-Train's Operational Management Centre, which monitors all A-Train facilities, receives error reports and is responsible for camera surveillance of the stations Arlanda South, Arlanda North, Arlanda Central and tracks 1 and 2 at Stockholm Central Station.

**Railway Infrastructure:** The track, signalling and safety facilities intended for railway traffic, traffic management installations, installations for the supply of electricity to traffic and other fixed installations necessary for the existence, operation or use of the installations, except where the installations and equipment constitute, or are located within, privately owned branch lines, privately owned sidings or facilities for services other than passenger stations.

**Railway Network:** A coherent Railway Infrastructure managed by a single Infrastructure Manager.

**Railway Undertaking:** The provider of traction and the operator of railway services.

**Railway Vehicle:** Rolling stock capable of travelling on railway tracks.

**Rescue:** Measures taken by emergency services in accordance with the law on protection against accidents (2003:778).

**Salvage:** Measures, where appropriate after completion of Clearance, for the purpose of disposal of rolling stock and/or other property belonging to the Railway Undertaking.

**Traffic Access Agreement:** Agreement between the Infrastructure Manager and the Railway Undertaking or other applicant concerning the terms and conditions for operating on the Railway Network in connection with the allocation of a Train Path

**Train Path:** The infrastructure which, according to the Timetable, may be used to move a train from one place to another during a certain period of time.

**Transiting Passenger Traffic:** The passenger traffic that uses Arlanda Link without picking up or dropping off passengers at Arlanda Airport (one of the Halts Arlanda North, Arlanda South or Arlanda Central).

**Traveller:** All Railway Undertakings' Travellers to and from Arlanda Link Halts, excluding Commuters and persons under 18 years of age.

**Timetable:** The route and information on the time and day according to which a train is to run.

## 1 GENERAL INFORMATION

### 1.1 Introduction

This network statement has been prepared by A-Train and is intended for Railway Undertakings that wish to operate or currently operate Arlanda Link and for the Swedish Transport Administration, which handles Capacity Allocation and traffic management on Arlanda Link. This network statement contains basic information about A-Train and information about the conditions for operating Arlanda Link.

This network statement describes the Railway Network managed by A-Train, the conditions for access, information on the procedure and criteria for allocation of infrastructure capacity. A-Train is responsible for the information about the Railway Network and the Swedish Transport Administration for the Capacity Allocation.

The network statement is prepared based on the legislation, including related administrative regulations, in force at the time of publication. The network statement does not take into account laws under development. The network statement is regularly updated and amended as necessary.

### 1.2 A-Train's Organisation and Activities

A-Train, as Infrastructure Manager, owns and operates Arlanda Express on Arlanda Link. Infrastructure management is organised under A-Train's "Infra" unit, which is supported by the Management and Administration Units and the Security Department. The Infra unit is tasked with managing the infrastructure that A-Train controls, but which is owned by AIAB.

AIAB is owned by the Swedish state and has entered into an agreement with A-Train whereby A-Train, which built Arlanda Link, has the right to lease Arlanda Link with an exclusive concession. The agreement gives A-Train the right to operate train services until 2050. A-Train's operations are conducted entirely on a market basis.

A-Train has a safety licence as Infrastructure Manager for the Skavstaby - Arlanda - Myrbacken section with associated Halts, known as Arlanda Link, and tracks 1 and 2 at Stockholm Central Station. The licence does not cover traffic management, as the Swedish Transport Administration is responsible for this on behalf of A-Train under a separate contract.

### 1.3 Period of Validity

The information in this network statement relates to the Annual Timetable 2025, which runs from 15 December 2024 to 13 December 2025. This network statement will be updated as necessary. The information is aimed at anyone with a detailed interest in planning traffic flows during the current Annual Timetable.

### 1.4 Publication

The network statement is published on A-Train's website, [www.arlandaexpress.com](http://www.arlandaexpress.com). In accordance with Directive 2012/34/EU of the European Parliament and of the Council, the document is published in both Swedish and English.

References to the Swedish Transport Administration's network statement in this network statement refer to the description published on the Swedish Transport Administration's website, under the tab "*Network Statement* (NS)", <https://bransch.trafikverket.se/for-dig-i-branschen/jarnvag/jarnvagsnatsbeskrivningen-jnb/>.

## **1.5 Consultations**

A-Train is preparing this network statement for inspection and consultation. Consultation responses should be sent by e-mail to [tomas.borg@atrain.se](mailto:tomas.borg@atrain.se) by 24-06-30.

The adopted network statement is published on the website by 24-07-05. Any deviations from the date of publication, in the event that longer coordination needs to take place, are communicated via deviation messages on A-Train's website.

## **1.6 Co-Operation between Infrastructure Managers**

A-Train cooperates with the Swedish Transport Administration regarding the provision and allocation of infrastructure capacity. The methods for co-operation are described in the Swedish Transport Administration's network statement.

## **1.7 Implementation**

Through a separate contract with A-Train, the Swedish Transport Administration carries out Capacity Allocation and traffic management on Arlanda Link. However, the final responsibility for Capacity Allocation lies with A-Train.

## **1.8 Appeals**

A Railway Undertaking or an applicant can refer disputes to the Swedish Transport Agency about whether the network statement has been drawn up in accordance with current regulations, see further information on the Swedish Transport Agency's website, [www.transportstyrelsen.se](http://www.transportstyrelsen.se).

## **1.9 Contact**

Contact details for further information about this network statement, the Swedish Transport Administration, supervisory matters, and Arlanda Link can be found in [Annex 1](#).

## **2 ACCESS AND TRAFFIC CONDITIONS**

### **2.1 Introduction**

The conditions that must be met in order to obtain the right to carry out or organise traffic on the Railway Network managed by A-Train are set out in the Railway Market Act (2022:365), the Railway Market Ordinance (2022:416) and regulations drawn up pursuant to these statutes.

### **2.2 General Access Conditions**

Only the Railway Undertakings that A-Train has approved are entitled to pick up and drop off passengers travelling to or from Arlanda Airport on the line between Stockholm Central Station and Arlanda Airport, which follows from Chapter 6, Section 4 of the Railway Market Act and Chapter 5, Section 8 of the Railway Market Ordinance.

AIAB has, by agreement, appointed A-Train as manager of Arlanda Link. A-Train has a right and an obligation to operate or organise rail traffic on Arlanda Link. As the Infrastructure Manager, A-Train thus has a discretionary right to determine who is entitled to pick up and drop off passengers on the line between Stockholm Central Station and Arlanda Airport. However, this restriction does not apply to International Passenger Traffic.

This means that anyone who operates or organises Concessionary Passenger Traffic, Transiting Passenger Traffic, International Passenger Traffic or does not pick up or drop off passengers on the route between Stockholm Central Station and Arlanda Airport is entitled to operate or organise rail traffic on Arlanda Link. This applies on condition that the Railway Undertaking has been allocated a Train Path and has entered into a Traffic Access Agreement with A-Train for the operation of Arlanda Link.

The term "Stockholm Central Station" in this network statement includes all stations within a 15 km radius of Stockholm Central Station.

### **2.3 Permits**

Several permits are required to operate on Arlanda Link. The first is that the Railway Undertaking must have a licence for its operations in accordance with Chapter 2, Sections 1-2 of the Railway Market Act or a temporary licence in accordance with Chapter 2, Section 12 of the Railway Market Ordinance. Railway Undertakings must also have a licence in the form of a safety certificate in accordance with Chapter 3 of the Railway Safety Act (2022:367) and a valid Traffic Access Agreement with A-Train. Further information on the application for a licence and joint safety certificate can be found on the Swedish Transport Agency's website, [www.transportstyrelsen.se](http://www.transportstyrelsen.se).

Railway Undertakings must have a safety management system and such other procedures in place to ensure safe operations as required by the Swedish Transport Agency.

A-Train imposes requirements on Railway Undertakings regarding the basis for intervention cards. This information is submitted to the Swedish Transport Administration with the associated documentation required, see the Swedish Transport Administration's website [www.trafikverket.se](http://www.trafikverket.se).

### **2.4 General Business Conditions**

#### **2.4.1 Framework Agreements**

Under the railway legislation, Framework Agreements can be concluded for the right to operate or organise services, without specifying Train Paths, and for arrangements that will last longer than an Annual Timetable. Framework Agreements do not replace a Traffic Access Agreement.

A-Train is not obliged to allow other Railway Undertakings to operate or organise traffic on Arlanda Link



as A-Train alone decides who is entitled to pick up and drop off passengers on Arlanda Link, except for International Passenger Traffic.

A-Train does not currently conclude Framework Agreements.

#### **2.4.2 Traffic Access Agreements**

Rail traffic may not be carried out on Arlanda Link without a Traffic Access Agreement having been concluded with A-Train in connection with the allocation of Train Paths.

Traffic Access Agreements contain the administrative, technical and financial conditions necessary to use a Train Path and are competitively neutral and non-discriminatory towards Railway Undertakings operating or organising rail services on the network managed by A-Train. The Traffic Access Agreement regulates the conditions for access to the tracks. The conditions are derived from the respective Annual Timetable and constitute a confirmation of the allocated Train Path.

An application for a Traffic Access Agreement is made through a contract with A-Train as soon as the current network statement is established. The Traffic Access Agreement can be signed during the period between the adoption of the relevant Annual Timetable and the start of traffic.

#### **2.4.3 Charges**

Charges for using A-Train's Railway Network are set out in section 6.

#### **2.5 Operational Regulations**

Swedish Transport Administration's Traffic Regulations for Railways (TDOK 2015:0309) applies to A-Train's infrastructure.

Traffic on A-Train's infrastructure shall be conducted in accordance with the provisions of the regulations specified in Annex 2 and on the Swedish Transport Administration's website, [www.trafikverket.se](http://www.trafikverket.se).

In addition to these provisions, Railway Undertakings shall have the necessary additional provisions in their safety instructions.

The operational regulations may be updated to reflect current regulations.

##### **2.5.1 Regulations on Electrical Safety**

The overall requirements for electrical safety are set out in the National Electrical Safety Board's regulations (ELSÄK-FS 2008:1, 2008:2 and 2008:3 with associated amending regulations).

More information is available on the National Electrical Safety Board's website, [www.elsakerhetsverket.se](http://www.elsakerhetsverket.se).

##### **2.5.2 Other Regulations**

To reduce the risk of unauthorised persons climbing onto vehicles and suffering an electrical accident, there are rules for how vehicles may be parked under a live overhead line. The rules can be found in the Swedish Transport Administration's Electrical Safety Regulations for Stations (TDOK 2014:0415).

Electrical bridging is a problem that occurs on the Railway Network. Electrical bridging means that the vehicles' pantographs bridge voltage from a live overhead contact line section to an overhead contact line section that has been disconnected due to work on the overhead contact line. This puts the lives of personnel working on the overhead contact line at risk. It is important that the interaction works and that Railway Undertakings are aware of the problem and can help to reduce the risks.

See also Annex 3 regarding safety of activities in the track area.

### **2.5.3 Driver's Orders**

Railway Undertakings operating on Arlanda Link do so according to a driver's order. Access to driver's orders is reached via the Swedish Transport Administration's driver's order system and is described in more detail in the Swedish Transport Administration's network statement.

Information on accessibility to the Swedish Transport Administration's IT systems can be found on the Swedish Transport Administration's website, [www.trafikverket.se](http://www.trafikverket.se).

### **2.6 Railway Vehicles**

Railway Vehicles to be used by an applicant must be authorised by the Swedish Transport Agency. A-Train requires a copy of the vehicle approval issued by the Swedish Transport Agency.

Detailed conditions for the operation of Railway Vehicles are described in [Annex 4](#).

### **2.7 Test Runs**

A Railway Undertaking can apply for a test run at Arlanda Link. In order to test run a vehicle, the Swedish Transport Agency must approve the temporary use of the vehicle or vehicle combination. It is also required that the Railway Undertaking applies to the Swedish Transport Administration for test runs and that the Swedish Transport Administration has decided on the conditions for test runs and on capacity that is adapted to the decision on the conditions for test runs.

The application for test runs on A-Train's Railway Network must be in writing. The application, which must be submitted to A-Train, must be accompanied by the Swedish Transport Administration's test run decision and the Swedish Transport Agency's decision on temporary approval of the Railway Vehicle.

Information on test run authorisation and the application process can be found on the Swedish Transport Agency's website, [www.transportstyrelsen.se](http://www.transportstyrelsen.se).

Conditions for test runs are described in the Swedish Transport Administration's network statement description.

### **2.8 Exceptional Transport**

Exceptional Transport may be authorised if there is no risk of damage to the infrastructure or exceeding restrictions in accordance with the applicable restrictions. Exceptional Transport refers to transport that exceeds any technical standard for the track system and which may be carried out under certain conditions decided by A-Train.

The application for Exceptional Transport shall be submitted to A-Train after the Swedish Transport Administration has approved such an application. The application shall contain an attached copy of the Swedish Transport Administration's decision on the transport permit, with the transport conditions specified.

The conditions for permits for Exceptional Transports are described in more detail in the Swedish Transport Administration's network statement.

## **2.9 Responsibility**

### **2.9.1 Liability in Case of Delays**

To prevent operational disruptions, a performance scheme is applied on Arlanda Link, in accordance with the Railway Market Act. Delay and cancellation charges must be paid by anyone who causes deviations from the utilisation of Arlanda Link as determined in the Annual Timetable and Track Access Agreement. The principles for the performance scheme and for registration of deviations are described in Section 6.

### **2.9.2 Liability for Damage**

Liability for material damage arising from railway operations on Arlanda Link shall be borne by the party causing the damage. A party includes its personnel, personnel used by the party and the party's equipment, or equipment used by the party.

Claims for compensation for financial loss must be made in writing to A-Train. The claim must include a description of the events and grounds for the claim and documentation showing and specifying the damage.

The Swedish Accident Investigation Authority can investigate accidents and serious incidents in certain circumstances. If the Swedish Accident Investigation Authority has investigated the incident, the Authority's causal assessment will determine the basis for liability between the parties.

### **2.9.3 Contributing to Damage**

Compensation payable by the parties in respect of damage may be adjusted if the other party has contributed to the damage. The adjustment shall be made on the basis of what is reasonable having regard to the fault on both sides.

### **2.9.4 Amount of Compensation**

A party's obligation to compensate includes an amount of compensation corresponding to the value of the object or the costs of repair, depreciation and compensation for immobilisation and all other costs directly attributable to the damage. Damage that is attributable to ordinary wear and tear is not compensated.

### **2.9.5 Damages**

If the Railway Undertaking does not comply with the general access conditions and thus does not fulfil its obligations or obligations under the Traffic Access Agreement, the Railway Undertaking shall compensate A-Train. The compensation amounts to [platform fee times two] per passenger that the Railway Undertaking picks up and/or drops off in violation of the access conditions set out in the Traffic Access Agreement.

### **2.9.6 Responsibility towards Third Parties**

As Infrastructure Manager for Arlanda Link, A-Train is liable to third parties to the extent that this follows from railway legislation. If A-Train has compensated a third party for damage, A-Train has a right of recourse against the Railway Undertaking insofar as it can be shown that the Railway Undertaking is responsible for the damage in question.

Railway Undertakings are liable for damage caused to passengers and/or staff as a result of railway operations. What the Railway Undertaking has paid by law in compensation for such damage, the Railway Undertaking may only seek reimbursement from A-Train if the Railway Undertaking proves that A-Train caused the damage.

The ticket or other travel document used by a Railway Undertaking in its operations shall clearly indicate which Railway Undertaking is liable and against which undertaking injured passengers can claim.

### **3 INFORMATION ON INFRASTRUCTURE**

#### **3.1 Introduction**

The Railway Market Act requires A-Train to prepare a description of the Railway Network under its control. Such a description must contain details of the available infrastructure, information on the conditions of access, use of the infrastructure and the procedures and criteria for Capacity Allocation. In this section of the network statement, A-Train describes the available infrastructure.

#### **3.2 Description of the Infrastructure**

A-Train's railway facility comprises Skavstaby - Arlanda - Myrbacken with associated Halts and tracks 1 and 2 at Stockholm Central Station. The railway facility borders the Swedish Transport Administration's track system at Skavstaby, km 29+300, and Myrbacken, km 146+800. Within the Arlanda operational point area, there are Halts at Arlanda Central, Arlanda South and Arlanda North. All parts have double tracks. All parts have coverage with GSM-R (MobiSIR).

The Arlanda Nedre operational point area comprises the area between Blackvreten, Arlanda South and Arlanda Central, and is the area where the tracks divide between the turning track with the Arlanda South and North Halts and the transiting track with the Arlanda Central Halt.

Transiting Passenger Traffic only passes Arlanda Central and thus not the Arlanda South and Arlanda North Halt.

Maps of the railway system can be found in [Annex 5A](#) and [Annex 5B](#).

##### **3.2.1 Turnstiles for tickets**

There is a manned entrance and turnstiles for tickets at the entrance to Arlanda Central to enable the Railway Undertakings to sell tickets and check that Travellers have valid tickets to cross the barrier line. The Railway Undertakings are jointly responsible for the equipment associated with the turnstiles and their operation and maintenance, whereby special agreements shall be made between the Railway Undertakings.

Railway Undertakings shall be given access to installed turnstiles. Necessary adaptations and updates to the Railway Undertaking's ticket systems shall be paid for by the respective Railway Undertaking. However, adaptations must be approved in advance by A-Train, other Railway Undertakings and, where applicable, the relevant rights holders. The equipment belongs to the Railway Undertakings, which shall be jointly responsible for the removal of the equipment when no Railway Undertaking operates traffic on Arlanda Link, unless otherwise agreed between A-Train and the Railway Undertakings concerned.

##### **3.2.2 Blackvreten Train Service Centre**

The Skavstaby - Arlanda North section includes a siding facility with the Blackvreten train service facility. Blackvreten has deviating main tracks and a number of non-signalled stabling tracks adjacent to the train service facility. In the depot building, only vehicles of letter X3 may be driven if no other agreement has been made with the facility manager.

##### **3.2.3 Connecting Railway Network**

The Swedish Transport Administration is the Infrastructure Manager for connecting infrastructure. More information about the Swedish Transport Administration's Railway Network can be found in the Swedish Transport Administration's network statement.

### 3.3 Capacity and Technical Characteristics of the Infrastructure

#### 3.3.1 Capacity Characteristics of the Infrastructure

On behalf of A-Train, the Swedish Transport Administration is responsible for traffic management at Arlanda Link. Traffic management includes train dispatching, monitoring and management of traffic operations and information about train movements. It also includes the conditions and requirements for the movement of traffic, such as Timetables and driver's orders, as well as measurements from the Swedish Transport Administration's detectors.

For information on applicable operational regulations, see Annex 2.

#### 3.3.2 Skavstaby - Arlanda North

Characteristics of Skavstaby - Arlanda North	
Track gauge	1,435 mm
Tracks	60E1 and 50E3
Briefs	Concrete with Fast Clip fastening and wood with Heyback fastening
Maximum authorised speed	200 km/h
Track length	22.8 kilometres
Number of gears	33 pcs.
Number of tunnels	2
Openable bridges	No
Maximum authorised axle load	22.5 tonnes
Maximum authorised wagon weight per metre	6.4 tonnes
Maximum slope	20 ‰
Safety signalling system	Yes, line blocking with remote control
ATC	Yes
Overheating detectors	No
Level crossings	No
Power supply	Overhead line 15,000 V with period 16 2/3 Hz
Communication system	GSM-R
Maximum train length	155 m (applies to Halt Arlanda North)

Dispensing free space profile	No
Authorised load profile	A
Transport of dangerous goods	Not authorised

## 3.3.3 Arlanda Central - Myrbacken

Properties regarding Arlanda Central - Myrbacken	
Track gauge	1,435 mm
Tracks	60E1
Briefs	Concrete with fastening Fast Clip
Maximum authorised speed	200 km/h, in the tunnel system 100 km/h.
Track length	15.15 km
Number of gears	10
Number of tunnels	1
Openable bridges	No
Maximum authorised axle load	22.5 tonnes
Maximum authorised wagon weight per metre	6.4 tonnes
Maximum slope	15‰
Safety signalling system	Yes, line blocking with remote control
ATC	Yes
Overheating detectors	No
Level crossings	No
Power supply	Overhead line 15,000 V with period 16 2/3 Hz
Communication system	GSM-R
Maximum train length	355 m (applies to Halt at Arlanda Central)
Dispensing free space profile	No
Authorised load profile	A
Transport of dangerous goods	Not authorised



## 3.3.4 Tracks 1 and 2 Stockholm Central

Characteristics of Tracks 1 and 2 Stockholm Central	
Track gauge	1,435 mm
Tracks	50E3 and 60E1 (end of track 1)
Briefs	Concrete with reinforcement Pandrol
Maximum authorised speed	30 km/h
Track length	632 m
Number of gears	0
Number of tunnels	0
Openable bridges	No
Maximum authorised axle load	22.5 tonnes
Maximum authorised wagon weight per metre	6.4 tonnes
Maximum slope	5‰
Safety signalling system	Yes, operating site with system H (Stockholm operating site), long distance train dispatcher.
ATC	Yes
Overheating detectors	No
Level crossings	No
Power supply	Overhead line 15,000 V with period 16 2/3 Hz
Communication system	GSM-R
Maximum train length	Track 1: 230 metres Track 2: 260 m (387 m including siding)
Dispensing free space profile	No
Authorised load profile	A. Platform, partly 1,150 mm, partly 580 mm above the top of the rail.
Transport of dangerous goods	Not authorised

### **3.3.5 Planned Infrastructure Changes**

There are no planned changes to the technical or capacity characteristics of the infrastructure under the current Annual Timetable.

## **3.4 Traffic Restrictions**

### **3.4.1 Freight Traffic**

Arlanda Link is reserved for passenger traffic. This means that freight traffic is not permitted on Arlanda Link. Alternative Railway Infrastructure for freight traffic is available on the Swedish Transport Administration's Railway Network, see the Swedish Transport Administration's website [www.trafikverket.se](http://www.trafikverket.se).

### **3.4.2 Loading Gauge**

The applicable Loading Gauge is described in [Annex 6](#).

Halts Stockholm Central platform 1, Arlanda South and Arlanda North have an elevated platform, with spacing:

- Track centre to platform: 1,700 +40/-10 mm.
- Rail top edge to platform top edge: 1,150 +10/-20 mm.

## **3.5 Maintenance and Service Facilities**

There is a train service centre at Blackvreten.

## **3.6 Planned Engineering Works**

Major engineering works planned during the Annual Timetable are shown in [Annex 7](#).

## **4 CAPACITY ALLOCATION**

### **4.1 General**

This section describes the rules and processes for the Capacity Allocation on Arlanda Link. Section 2 above states which Railway Undertakings are entitled to operate or organise traffic on Arlanda Link.

Capacity Allocation is regulated by the Railway Market Act, the Railway Market Ordinance and related administrative regulations.

Capacity Allocation on Arlanda Link is carried out in accordance with the specified regulations by the Swedish Transport Administration on behalf of A-Train and follows the process and schedule described in the Swedish Transport Administration's network statement, with the changes and specifications set out below.

The Swedish Transport Administration's network statement can be found on its website.

### **4.2 Application for Train Path Capacity**

#### **4.2.1 Requirements for Applicants**

Anyone who is entitled under the Railway Market Act to carry out or organise railway traffic can apply for a Train Path on Arlanda Link, see also section 2 above. The requirements must be met by the end of the application period at the latest.

#### **4.2.2 Application for the Adoption of the Annual Timetable**

Train Paths are allocated for one Annual Timetable at a time. Within the framework of this network statement and in particular Section 2, applicants are free to apply for the capacity they wish.

Applications for Train Path capacity can be made directly to A-Train or the Swedish Transport Administration. If an application is submitted to A-Train, A-Train will submit the application to the Swedish Transport Administration for processing by the Swedish Transport Administration. The processing of the application and what such an application should contain is described in the process description in the Swedish Transport Administration's network statement.

The application must be submitted to A-Train or the Swedish Transport Administration no later than the applicable date in the Swedish Transport Administration's network statement.

#### **4.2.3 Application for ad hoc Capacity**

So-called ad hoc applications are made directly to A-Train or the Swedish Transport Administration. If an application is submitted to A-Train, A-Train will submit the application to the Swedish Transport Administration for processing by the Swedish Transport Administration. The processing of the application and what such an application should include is described in the process description in the Swedish Transport Administration's network statement.

### **4.3 Path Allocation Process**

On the basis of the applications, the Swedish Transport Administration prepares a draft Annual Timetable. The applicants' needs for infrastructure capacity are then coordinated before the Annual Timetable is adopted. The allocation process is described in more detail in the Swedish Transport Administration's network statement.

#### **4.3.1 Dispute Resolution**

If a conflict of interest does not appear to be resolved during coordination, the applicants affected by the

conflict may request dispute resolution no later than the applicable date in the Swedish Transport Administration's network statement. When an applicant requests dispute resolution, it must at the same time submit to the Swedish Transport Administration or A-Train a description of the conflict of interest, a description of the consequences for the production of the capacity applied for and a justification for why the solutions proposed in the coordination are not accepted. Applicants may also submit new proposals to resolve the conflict of interest.

After the dispute resolution has been requested, the Swedish Transport Administration or A-Train will invite the parties involved to a dispute resolution council where the Swedish Transport Administration or A-Train will present the solution chosen and the alternatives rejected, as well as the reasons for this.

According to Chapter 10, Section 8 of the Railway Market Act, a dispute about the decision and about ordinary decisions regarding Capacity Allocation can be referred to the Swedish Transport Agency, [www.transportstyrelsen.se](http://www.transportstyrelsen.se).

#### **4.3.2 Congested Infrastructure**

If a conflict of interest cannot be resolved through coordination and dispute resolution between the applicants, the affected part of the infrastructure shall be declared congested. In the case of congested infrastructure, the conflict of interest is resolved by the Swedish Transport Administration applying the priority criteria set out in Annex 8, in accordance with a written directive from A-Train.

When the infrastructure is declared congested, A-Train, in consultation with the Swedish Transport Administration, will carry out a capacity analysis and draw up a capacity reinforcement plan.

A more detailed description of the process for congested infrastructure can be found in the Swedish Transport Administration's network statement.

#### **4.3.3 Established Annual Timetable**

The Annual Timetable for Arlanda Link is established by the Swedish Transport Administration on behalf of A-Train. Dates and deadlines for the planning process for the Annual Timetable and other information regarding the Annual Timetable process are set out in the Swedish Transport Administration's network statement.

The Swedish Transport Administration also decides on preliminary Train Paths for International Passenger Traffic.

#### **4.3.4 Allocated Train Paths**

A Train Path is allocated for one Annual Timetable at a time. If allocated capacity is not to be utilised after the allocation of Train Paths, the Swedish Transport Administration shall immediately be informed that the capacity is thus available for other use. Applicants who have been allocated capacity but have not utilised the capacity to the appropriate extent shall, at the request of the Swedish Transport Administration, relinquish the capacity if this is not due to factors of an economic nature that are beyond the applicant's control. The Railway Undertaking that has been allocated a Train Path may not transfer it to another Railway Undertaking. If a Train Path has not been used, this may be taken into account in the subsequent allocation of Train Paths.

#### **4.3.5 Measures in Case of Disturbances**

Guidelines for operational traffic management are issued by the Swedish Transport Administration before each Annual Timetable. Principles for the Swedish Transport Administration's measures in the event of disruptions are described in the Swedish Transport Administration's network statement.

In the event of disruptions or obstacles in the Railway Network on Arlanda Link, the priority criteria according to Annex 8 apply.

#### **4.4 Capacity for Maintenance Work**

A-Train indicates the need for capacity for maintenance and other engineering works at the time when requests for infrastructure capacity are due. The process for allocating capacity is the same as for the requests. Planned major maintenance works are stated in [Annex 7](#).

#### **4.5 Clearing, Salvage and Rescue Operations**

As Infrastructure Manager, A-Train is responsible for Clearance on Arlanda Link. Railway Undertakings are obliged, at the request of A-Train, to make Railway Vehicles and drivers available for the transport of their own Railway Vehicles to the designated location. In the event of a vehicle breakdown, Railway Undertakings are entitled to arrange for their own Railway Vehicle to be cleared, subject to the approval of A-Train. Operational management takes place in consultation between the Railway Undertaking and the Swedish Transport Administration's traffic management function and OMC. If an agreement regarding Clearance cannot be reached, A-Train will arrange for the Clearance of the Railway Undertaking's Railway Vehicle at the Railway Undertaking's expense.

Railway Undertakings are responsible for Salvage of their own Railway Vehicles. If Salvage does not take place within a reasonable time, A-Train is entitled to arrange for Salvage itself, at the Railway Undertaking's expense.

A Railway Undertaking shall be liable for all costs related to Rescue, Clearance and Salvage if the Railway Undertaking is responsible for the event giving rise to the action.

Railway Vehicles where there is a risk of fire or smoke development, e.g. in case of suspected overheating, must not be driven into a tunnel. When such a risk exists, Railway Vehicles must be stopped before the E4 tunnel Rosersberg or the Arlanda Tunnel System.

As the Swedish Transport Administration operates Arlanda Link, handling, notification and co-operation in investigations of accidents, incidents and emergencies are carried out in accordance with the Swedish Transport Administration's regulations, with the exception of the above. These are described in the Swedish Transport Administration's network statement. See also Annex 2, regarding the current Emergency Plan.

## **5 SERVICES**

### **5.1 General**

A-Train has an obligation to provide a minimum package of access services to the Railway Undertakings obtaining access to the railway facility.

A-Train provides services in addition to these access services to Railway Infrastructure as described below, either by itself or by agreement with the Swedish Transport Administration. Railway Infrastructure means track, signalling and safety facilities intended for railway traffic, traffic management facilities, facilities for the supply of electricity to traffic and other fixed facilities needed for the existence, operation or use of the facilities, but not if the facilities and devices constitute, or are located within, privately owned connecting lines, privately owned sidings or facilities for services other than passenger stations.

Utilisation of services is governed by the Framework Agreements and Traffic Access Agreements that Railway Undertakings sign with A-Train.

### **5.2 Train Path Allocation Services**

A-Train provides the following services when allocating Train Paths, which refers to the use of switches and crossings in train tracks.

A-Train provides all the information that may be necessary to perform or operate the railway traffic for which capacity has been allocated. This includes:

- Halt Arlanda Central, with platform for passenger exchange and connection to Arlanda's Sky City,
- Halt Arlanda South with a platform for passenger exchange and connection to Arlanda's Terminals 2, 3 and 4, and
- Halt Arlanda North with platform for passenger exchange and connection to Arlanda's Terminal 5.

Electricity for train operations on A-Train's Railway Network is supplied by the Swedish Transport Administration. The arrangements for this are regulated in the Traffic Access Agreement that the Railway Undertaking has signed with the Swedish Transport Administration, as it is not possible for other Railway Undertakings than A-Train to only operate Arlanda Link. For information about electricity supply, please refer to the Swedish Transport Administration's network statement.

### **5.3 Ancillary services**

Ancillary services provided on the A-Train Railway Network are the following:

- Access to the GSM-R telecommunications network. Access to GSM-R is in accordance with the operator's (Swedish Transport Administration) terms and conditions. Conditions and charges for GSM-R are set out in the Swedish Transport Administration's network statement.
- Traction current is supplied by the Swedish Transport Administration. Conditions and charges for traction current is stated in the Swedish Transport Administration's network statement.

## 6 CHARGES

### 6.1 Charging Principles

For use of the Railway Infrastructure, A-Train charges a marginal cost-based charge in the form of a track charge and a special charge to contribute to cost recovery in the form of a station charge.

A-Train uses a performance scheme and cancellation charges to prevent service disruptions. Charges for traction current and GSM-R are levied by and paid to the Swedish Transport Administration.

All Railway Undertakings operating at Arlanda Central shall jointly bear all costs relating to the construction of the equipment associated with the turnstiles, such as the ticket counter, and all staff costs relating to the control and sale of tickets at the turnstiles.

### 6.2 Track Charge

Track charge for Annual Timetable 2025: SEK 0.072 per gross tonne kilometre

Preliminary track charge for future Annual Timetables:

- Annual Timetable 2026: SEK 0.078 per gross tonne kilometre.
- Annual Timetable 2027: SEK 0.081 per gross tonne kilometre
- Annual Timetable 2028: SEK 0.083 per gross kilometre.
- Annual Timetable 2029: SEK 0.085 per gross kilometre.

### 6.3 Station Charge

The station charge is the special charge that the Railway Undertaking must pay to A-Train for each Traveller and Commuter who gets off or on the Railway Undertaking's train at the Halts on Arlanda Link.

The station charge is based on the total costs borne by A-Train for the Railway Infrastructure at Arlanda Link, divided by the forecast number of Travellers.

The station charge for Annual Timetable 2025 amounts to SEK 138 per Traveller to and from the Halts on Arlanda Link.

Preliminary station charge for future Annual Timetables:

- Annual Timetable 2026: SEK 145 per Traveller
- Annual Timetable 2027: SEK 151 per Traveller
- Annual Timetable 2028: SEK 154 per Traveller
- Annual Timetable 2029: SEK 157 per Traveller

For Commuters, the Annual Timetable 2025 station charge amounts to SEK 419 per season ticket for each 30-day period commenced, regardless of how many journeys are made with the season ticket.

Preliminary station charge for Commuters for the next Annual Timetables:

- Annual Timetable 2026: SEK 440 per Commuter
- Annual Timetable 2027: SEK 458 per Commuter
- Annual Timetable 2028: SEK 469 per Commuter
- Annual Timetable 2029: SEK 478 per Commuter

#### **6.4 Delay and Cancellation Charges**

A-Train applies a performance scheme in accordance with the Railway Market Act. Arlanda Link is included in the Swedish Transport Administration's system for reporting and registering deviations from the utilisation of the infrastructure established in the Annual Timetable and in Traffic Service Agreements and the reasons for deviations.

The Swedish Transport Administration administers and collects traffic charges in accordance with what is stated in the Swedish Transport Administration's network statement. What is stated in the Swedish Transport Administration's network statement regarding the Swedish Transport Administration's rights and obligations shall instead refer to A-Train's rights and obligations for deviations on Arlanda Link.

A cancellation charge is charged as specified in the Swedish Transport Administration's network description.

For more information on the performance scheme, see the Swedish Transport Administration's network statement.

#### **6.5 Change of Charge**

Changes to the charge for the parties with whom A-Train has entered into Traffic Access Agreements are made according to the principles for consultation on the network statement.

#### **6.6 Debiting**

The charge is charged monthly after invoicing, or via self-invoicing, based on the information provided by the Railway Undertaking. The terms of payment for the extra services are set out in the Transport Agreement that A-Train has entered into with the Railway Undertaking.

With regard to the part of the station fee that constitutes the platform fee, the Railway Undertaking shall report to A-Train the total platform fee charged to passengers and the total number of passengers during the period. The railway undertaking is responsible for maintaining a quality assurance system in order to carry out quality assurance of the documentation regarding the total number of passengers and barrier line passages that are reported to A-Train. At A-Train's request, the quality assurance system shall be made available to enable control by A-Train or the person appointed by A-Train to carry out such control. More detailed terms and conditions for the quality review are set out in the Traffic Agreement that A-Train has entered into with the Railway Company.

If a railway undertaking applies self-invoicing, the fees must be quality reviewed before self-invoicing takes place.

#### **6.7 Traction Current**

Charges for electricity supply equipment for traction current for trains and consumed traction current for trains are levied by and paid to the Swedish Transport Administration, which supplies traction current to Arlanda Link. The conditions and charges for traction current can be found in the Swedish Transport Administration's network statement.

#### **6.8 GSM-R**

Charges for GSM-R are paid to the Swedish Transport Administration and are described in the Swedish Transport Administration's network statement.



## **7 SAFETY IN THE ARLANDA TUNNELS**

### **7.1 General**

The tunnel system under Arlanda Airport extends from Arlanda Nedre to Myrbacken, a distance of approximately six kilometres. The total tunnel system is just over eight kilometres long and has ten escape routes, four of which are access tunnels with drivable roads. There are also several connecting passages between the tunnels, which normally have closed fire doors.

The section between Skavstaby, outside Upplands Väsby, and Myrbacken, north of Odensala, via Arlanda Airport, comprises a tunnel system with almost nine kilometres of double track underground. In order to meet the expectations of rail traffic as a very safe transport system, there are high demands on safety measures and well-trained personnel.

### **7.2 Security**

Self-rescue is the main option for tunnel evacuation. This means that the tunnels are designed and equipped in such a way that they can be evacuated without the help of qualified personnel or emergency services.

A-Train's OMC is located at Arlanda Airport which monitors all of A-Train's facilities, receives error reports and is responsible for camera surveillance of the stations Arlanda South, Arlanda North, Arlanda Central and tracks 1 and 2 at Stockholm Central Station.

The OMC plays an important role in Rescue in the event of a fire or accident. The OMC will be contacted by the emergency management for information on the situation in the tunnels. The OMC also orders and directs evacuation from the tunnel system via loudspeaker and light signage information and sends out personnel in case of major incidents. The OMC is manned around the clock.

In case of an accident/fire in the tunnel, the OMC activates the following:

- Alarm to SOS, which generates an immediate full response and initiates the evacuation of platforms.
- Descending escalators are stopped.
- Lifts go up to ground level and then stop.
- Tunnel lights, flashing lights and headlights are switched on.
- Fire gas fans for escalators and lifts are started.
- Door to Evacuation Route 7, UR 7, is opened (road for cars and emergency vehicles).
- Fire hydrants are pressurised.
- Ventilation hatches in the terminals are opened.

### **7.3 Security and Communication Equipment**

The following equipment is available on escape routes:

- Flashing lights.
- Headlights.
- Luminescent boards (arrows with metre markings).
- Emergency exit signs.
- Airlocks.

The following equipment at the platform:

- Staff telephone.
- Emergency/service phones.
- Emergency phones.
- Ticketing machines, TVM, with the possibility to contact the OMC.
- Microphone that cancels remote calls.
- Fire alarm push button.
- Fire extinguishers.
- Platform lighting.
- Lightning.
- Airlocks at exits.

#### **7.4 Evacuation routes**

The tunnel system is equipped with ten escape routes chronologically numbered from south to north.

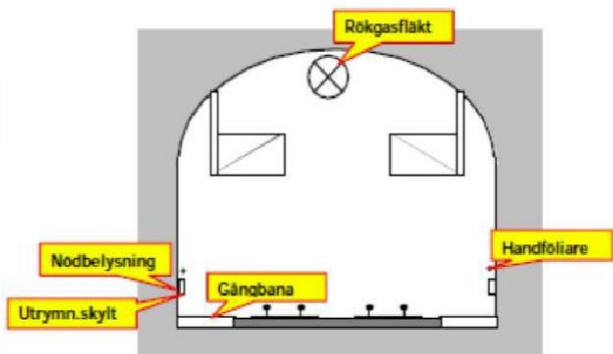
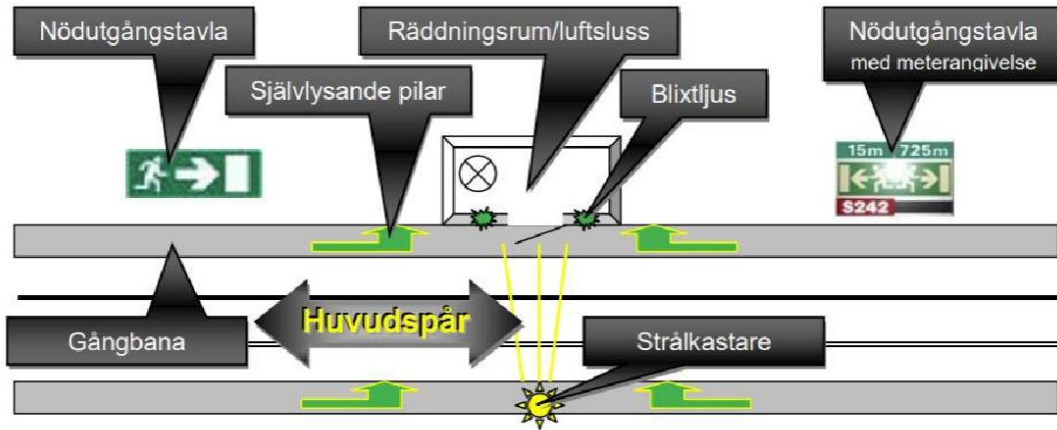
The escape routes can easily be found, if necessary, by equipping the walkways between the escape routes with continuous handrails.

The route to the nearest escape route is marked with luminescent arrows and at the emergency lighting there are boards indicating metres in both directions to the nearest escape route. At these boards there are switches to switch on the tunnel lighting.

Directly in front of each escape route, a spotlight illuminates the door between the track and the rescue room. On both sides of this door there are flashing lights mounted.

Evacuation from the tunnel system under Arlanda Airport can take place via tunnel mouths, rescue/service tunnels and via regular station exits. There are also three escape routes in the form of stairwells.

In the tunnels there are hardened walkways along the tunnel walls. At the doors leading to an escape route or stairwell there are illuminated emergency exit signs. Inside the doors of escape routes/stairwells leading to the open air, there is an airlock to prevent smoke from spreading into the escape route (rescue room and stairwell).



## 8 ANNEXES

The following annexes complement this network statement:

Annex 1	Contact Details
Annex 2	Operational Regulations
Annex 3	Safety of Activities in the Railway Area
Annex 4	Operation of Railway Vehicles on Arlanda Link
Annex 5a	Map of the Railway System
Annex 5b	Schematic Map of Part of the Railway System
Annex 6	Applicable Loading Gauge
Annex 7	Planned Major Railway Works
Annex 8	Priority Criteria
Annex 9	Facility Description for Stations

**ANNEX 1 - CONTACT DETAILS****Contact information about this railway description**

Address	Telephone	E-mail	Website
P.O Box 130 SE-101 22 Stockholm	+46 877 172 02 00	<a href="mailto:info@atrain.se">info@atrain.se</a>	<a href="http://www.arlandaexpress.com">www.arlandaexpress.com</a>

**Contact information for the Railway Department of the Swedish Transport Agency regarding supervisory matters.**

Address	Telephone	E-mail	Website
P.O. Box SE-267 781 23 Borlänge	+46 (0)77-150 35 03	<a href="mailto:jarnvag@transportstyrelsen.se">jarnvag@transportstyrelsen.se</a>	<a href="http://www.transportstyrelsen.se">www.transportstyrelsen.se</a>

**Contact information for the Swedish Transport Administration**

Address	Telephone	E-mail	Website
P.O. Box SE-810 781 28 Borlänge	+46 (0)771-921 921	<a href="mailto:Trafikverket@Trafikverket.se">Trafikverket@Trafikverket.se</a>	<a href="http://www.trafikverket.se">www.trafikverket.se</a>

**Contact information for the operation of Arlanda Link**

Address	Telephone	E-mail	Website
P.O. Box SE-810 781 28 Borlänge	+46 (0)10-123 89 84	<a href="mailto:trafikplanering.jarnvag.ktp@trafikverket.se">trafikplanering.jarnvag.ktp@trafikverket.se</a> <a href="mailto:tagledaren.ost@trafikverket.se">tagledaren.ost@trafikverket.se</a>	<a href="http://www.trafikverket.se">www.trafikverket.se</a>

**ANNEX 2 - OPERATIONAL FRAMEWORK**

Road Safety Instruction, General Part - Infrastructure Managers	ATF 06:0
Traffic Regulations for Railways	TDOK 2015:0309 all modules
Use of GSM-R on the Swedish Transport Administration's railway facility	TDOK 2016:0193
Electricity safety regulations for stations	TDOK 2014:0415
ATC instructions for on-board ATC Systems	TDOK 2014:0770
Points–control and stop block using a local setter, and control	TDOK 2017:0701
Holding of vehicles with raised pantograph. Technical requirements for vehicles.	TRVINFRA-00164 REQUIREMENTS
Holding of vehicles with raised pantograph. Technical requirements for vehicles.	TRVINFRA-00164 ADVICE
A-Train Emergency Plan	Ver 23-02-08

## **ANNEX 3 - SAFETY OF ACTIVITIES IN THE RAILWAY AREA**

### **Electrical safety**

#### *Damaged or Fallen Wire*

A damaged or fallen wire and other objects in its vicinity should always be considered energised and therefore dangerous to life. Never go near a fallen wire or derailed vehicle with a raised pantograph. Pantographs should be lowered if possible. If this cannot be done, contact the electrical contractor immediately to disconnect the voltage.

Immediately call the emergency number 112 or the Swedish Transport Administration's production site. Warn other people and keep watch, depending on the circumstances, until a person in charge of electrical work or a responsible officer from the emergency services arrives and takes over responsibility.

#### *Ladders and Other Long Objects*

Objects of conductive material must not be handled in such a way that there is a risk of them entering the immediate area.

A portable ladder longer than 2 metres and handled within 4 metres of a high-voltage installation shall be made of non-conductive material and bear a warning sign indicating the electrical hazard.

The warning sign shall be designed in accordance with the requirements of ELSÄK-FS 2008:2, general warning of electrical hazards, and shall be placed approximately 2 metres from the root end of the ladder.

#### *Cogeneration Plants*

In the event of a failure of the alternating heating element, the rail can assume dangerous voltages. In order to eliminate the risk of damage due to failure, the cogeneration plants should always be disconnected when working in the points.

For work where there is no direct contact with the rails (e.g., snow clearing with a broom, clearing of culverts), disconnection of the cogeneration plants is not required.

When working on the heat exchange system, the regulations SS-EN 50110-1 Edition 3 Maintenance of Electrical Installations must be followed.

The risk assessment shall indicate whether the cogeneration plant needs to be disconnected.

#### *Access to Operating Rooms*

To be able to enter operating rooms on their own, persons must be sufficiently instructed to avoid the hazards of electricity. Uninstructed personnel may only enter operating rooms under the supervision of a competent person.

Other regulations for operation rooms can be found in ELSÄK-FS 2008:2.

#### *Safety Zone*

The safety zone extends at least 2.20 metres from the nearest rail. Nobody is allowed to stay in the safety zone 10 seconds before a Railway Vehicle passes.

Stockpiles or similar shall not extend into the safety zone or closer than 4 metres to a live part of the installation.

*High-Visibility Clothing*

Persons staying in the track area shall wear high visibility clothing complying with standard EN 471, class 3. Logos or other non-fluorescent colours shall not affect the surface shown by the standard.



## **ANNEX 4 - OPERATION OF RAILWAY VEHICLES ON THE ARLANDA LINK**

### *Network Commutating DC Locomotives*

Locomotives of letters Rc may be operated multi-connected in passenger trains on Arlanda Link, for coupled locomotives the same conditions apply as for multi-purpose locomotives. For multiple couplers (or coupled locomotives), no higher power than driving mode 6 should normally be used.

Operation with three active Rc locomotives is not allowed.

### *Network Commutating Railcars*

Railcar trains X1, X10, X12 and X14 may operate on Arlanda Link with up to four units.

### *Asynchronous Vehicles*

Asynchronous vehicles may operate on Arlanda Link with regenerative electric brakes, even in multiple operation.

### *Other Electric Vehicles*

Electric vehicles which, according to the Annual Timetable, are not normally operated on Arlanda Link may be operated on a case-by-case basis after authorisation from the A-Train facility manager.

### *Prohibition of Operation of the X50 Series of Motorised Trailers*

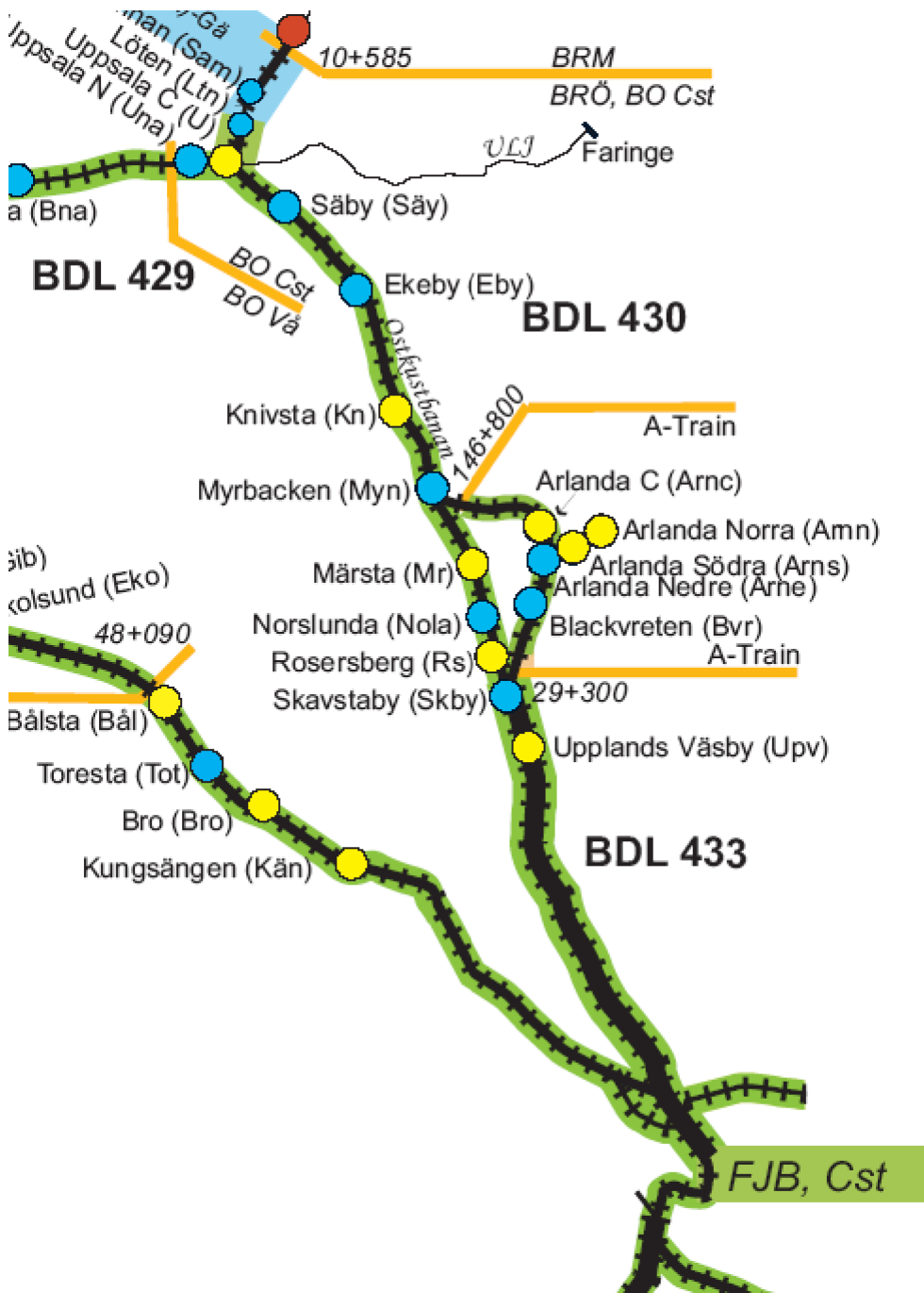
The Halts Arlanda South and Arlanda North may not be operated with railcars of the X50 series (Regina Crusaris), as the platform there is elevated (1,150 mm above the top of the rail). The stop point for such Railway Vehicles is the border between Arlanda Nedre and Arlanda South, marked with signs "Stop for X50 series".

### *Diesel Passenger Trains*

Scheduled diesel passenger trains may not operate on Arlanda Link.

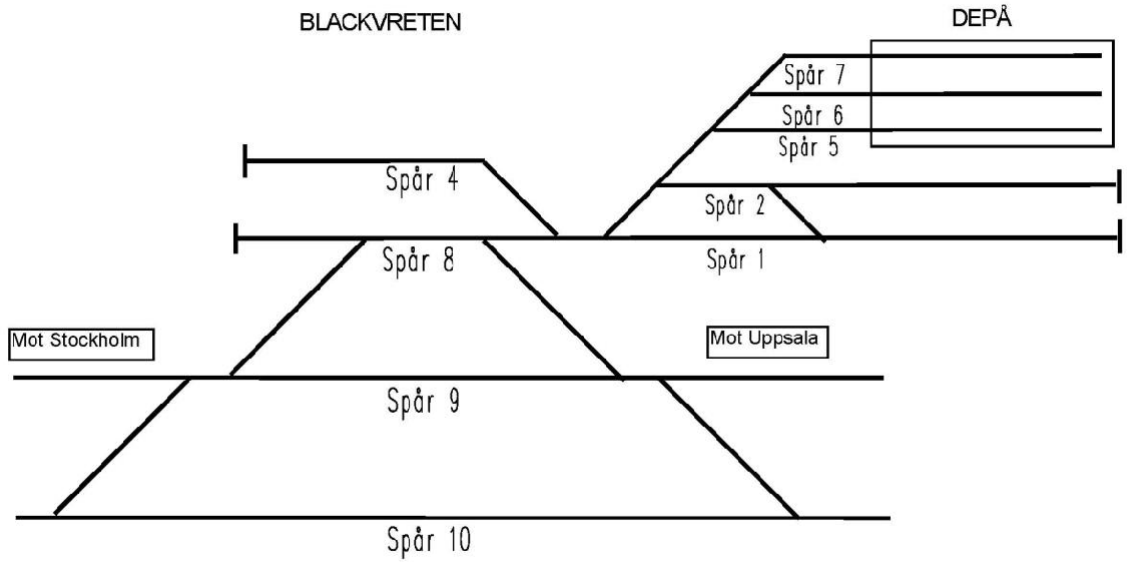
**ANNEX 5A - MAP OF THE RAILWAY SYSTEM**

Overview

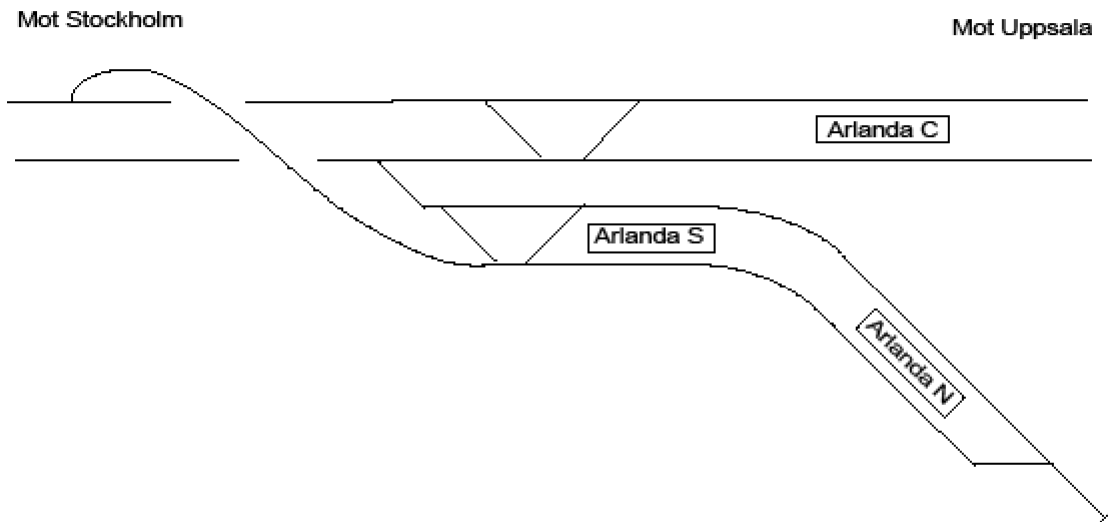


### ANNEX 5B - SCHEMATIC MAP OF PART OF THE RAILWAY SYSTEM

*Blackvreten, with train service facility*

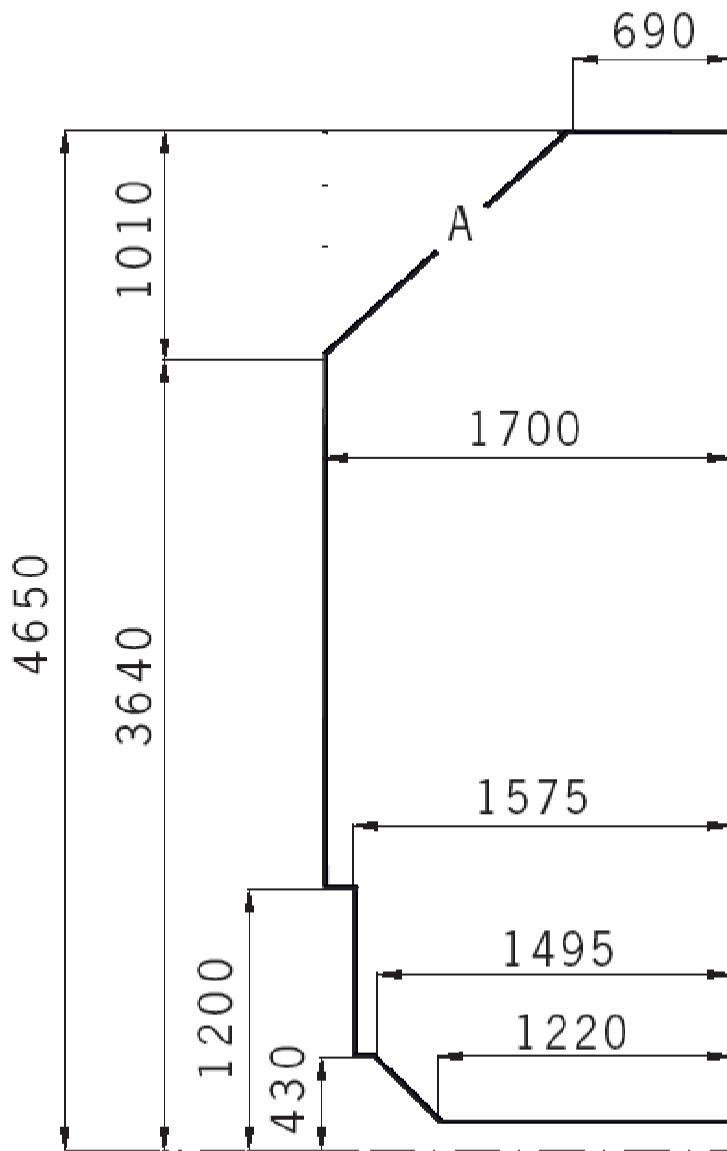


*Halts at Arlanda*



ANNEX 6 - CURRENT LOADING GAUGE

Lastprofil A



Mått i mm

## **ANNEX 7 - PLANNED MAJOR ENGINEERING WORKS**

Regular maintenance / train-free times, all tracks Skby - Myn:

- Monday – Friday 01:15 – 04:25
- Saturday – Sunday 01:25 – 04.25

Note: A review is underway of a possible test with a shortened regular maintenance window for about 3-4 weeks during the period weeks 26 – 33.

Planned major engineering works under Annual Timetable 2025 will mainly take place during pre-planned maintenance weeks as follows:

- Weeks 21, 23, 34 and 35 with extended time for maintenance, 23:55 – 04:55, resulting in traffic restrictions during the track work.

## **ANNEX 8 - PRIORITY CRITERIA**

The following priority criteria apply to Arlanda Link.

- 1) Concessionary Passenger Traffic with at least six trains per hour in each direction from 04:00 to 01:00.
- 2) Regional passenger services which allow embarkation and disembarkation at Arlanda Central, and which have a high proportion of time-sensitive Travellers. If several applicants meet this requirement, trains with the greatest capacity for passenger transport shall be prioritised.
- 3) Passenger services in the form of long-distance traffic which allow embarkation and disembarkation at Arlanda Central, and which have a high proportion of time-sensitive Travellers. If several applicants meet this requirement, trains with the greatest capacity for passenger transport shall be prioritised.
- 4) International Passenger Traffic.

## **ANNEX 9 - SERVICE FACILITY DESCRIPTION**

A-Train has four (4) stations dedicated to passenger interchange/embarkation:

- (1) Platform 1 at Stockholm C – intended for the Arlanda Express
- (2) Arlanda South - intended for the Arlanda Express
- (3) Arlanda North - intended for the Arlanda Express
- (4) Arlanda Central - intended for other operators' traffic

Access to stations and platforms is obtained in connection with the allocation of a Train Path. The access charge is specified in section 6.3.

Stations 2 and 3 are intended for traffic carried out by Arlanda Express and have an elevated platform of 1150mm. This entails, among other things, a ban on traffic with vehicles in the X40 series.

Station 4 is intended for traffic carried out by other operators and the platform has a standard height of 760mm.

The platforms at stations 2-4 are connected to Arlanda Airport via lifts and escalators.

The opening hours of the stations are adapted to the allocated Train Paths/Timetable.

A-Train is responsible for troubleshooting and cleaning at the stations. Errors are reported to OMC (contact details in Annex 1).

Arlanda Central is equipped with the Swedish Transport Administration's system for passenger information (signage and loudspeaker system for announcements).