Train path charge, passage and emission charges

1 Train path charge

The train path charge is a kilometre-(mileage-) based fee with three levels: high, intermediate and basic. The geographic distribution of the different levels are presented below. The charge is based on allocated capacity.

High level applied on the following routes:

- Stockholms central – Göteborg Central:
  - Stockholms central–Älvsjö (including Älvsjö godsbangård)
  - Älvsjö–Södertälje syd övre (south upper)-Partille
  - Partille– Göteborg Central

- Göteborg Central–Malmö Central:
  - Göteborg Central–Almedal
  - Almedal–Helsingborg–Landskrona East–Kävlinge–Lund
  - Lund–Malmö Central

- Malmö Central–Stockholms central:
  - Malmö Central–Arlöv
  - Arlöv–Åby–Katrineholm
  - Katrineholm-Södertälje syd övre (south upper)–Älvsjö
  - Älvsjö–Stockholms central

- Stockholms central–Gävle:
  - Stockholms central–Ulriksdal
  - Ulriksdal–Gävle

- Karlberg-Stockholms södra (south):
  - Karlberg-Stockholms city
  - Stockholm city-Stockholm södra (south)

- Malmö Central–Triangle–Hyllie–Lernacken
- Malmö Central–Östervärn
- Arlöv–Östervärn
- Lockarp–Svågertorp–Hyllie

- Fosieby-Svågertorp
- Svågertorp–Lernacken
- Lernacken-Peberholmen
- Helsingborg–Åstorp
- Hässleholm–Kristianstad
- Alvesta-Växsjö
- Gubbero–Olskroken
- Olskroken– Göteborg norra (north)
- Olskroken– Göteborg Marieholm– Göteborg Kville–Pölsebo–Skandiahamnen
- Göteborg Olskroken-Öxnered
- Öxnered-Vänersborg
- Laxå-Kristinehamn-Karlstad-Kil
- Jönköping-Nässjö
- Flemmingsberg-Södertälje centrum
- Stockholm–Bålsta
- Falun-Borlänge
- Hallsberg–Mjölby
- Råtsi-Svappavaara
- Riksgränsen (the frontier)-Luleå (including Kiruna malmbangård–Peuravaara och Gällivare–Koskullskulle)

Intermediate level applied on the following routes:

- Boden–Nyfors–Bastuträsk–Hällnäs–Vännäs
- Vännäs–Umeå–Gimonäs
- Gimonäs–Örnsköldsvik–Västeraspby
- Västeraspby–Härnösand–Sundsvall
- Sundsvall–Gävle
- Vännäs–Mellansel–Forsmo–Långsele–Bräcke
- Bräcke–Ånge–Bollnäs–Ockelbo–Gävle
- Ockelbo–Storvik
- Gävle-Storvik
- Storvik-Avesta Krylbo-Fagersta-Frövi-Hovsta
- Storvik–Falun
- Borlänge-Ludvika–Ställdalen–Frövi
- Borlänge–Avesta Krylbo–Sala–Uppsala
- Sala–Tillberga-Västerås norra (north)

- Bålsta-Västerås central
- Snyten–Kolbäck
- Fagersta–Ängelsberg
- Västerås–Kolbäck–Valskog–Arboga–Jädersbruk–Hovsta
- Kolbäck–Rekarne
- Södertälje syd övre–Eskilstuna–Rekarne–Valskog
- Åkers Styckebruk–Grundbro
- Älvsjö-Nynäshamn-Eskilstuna–Flen–Nyköping S–Oxelösund
- Linköping–Bjärka Säby
- Kil–Charlottenberg (riksgränsen)
- Kil–Öxnered
- Kornsjö–Skälebol
- Falköping–Jönköping
- Jönköping–Vaggeryd–Värnamo
- Göteborg Kville-Uddevalla
- Almedal-Borås
- Borås–Värnamo–Alvesta
- Växjö-Kalmar
- Emmaboda-Karlskrona
- Furet–Landeryd
- Torup–Hyltebruk
- Älmhult–Olofström
- Eldsberga–Markaryd–Hässleholm
- Åstorp–Hässleholm
- Kristianstad-Gullberna (Karlskrona)
- Arlöv–Flädie–Kävlinge–Teckomatorp–Helsingborg godsbangård
- Östervärn–Fosieby–Lockarp
- Lockarp–Trelleborg
- Lockarp–Ystad-Simrishamn
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Base level applies for the network in general.

The Swedish Transport Administration has developed a simulation system to calculate the Administrations charges for railway transports. In the system it is possible to calculate the train paths charges between given stations. The calculator system is a web application and is available via https://jvk.trafikverket.se/

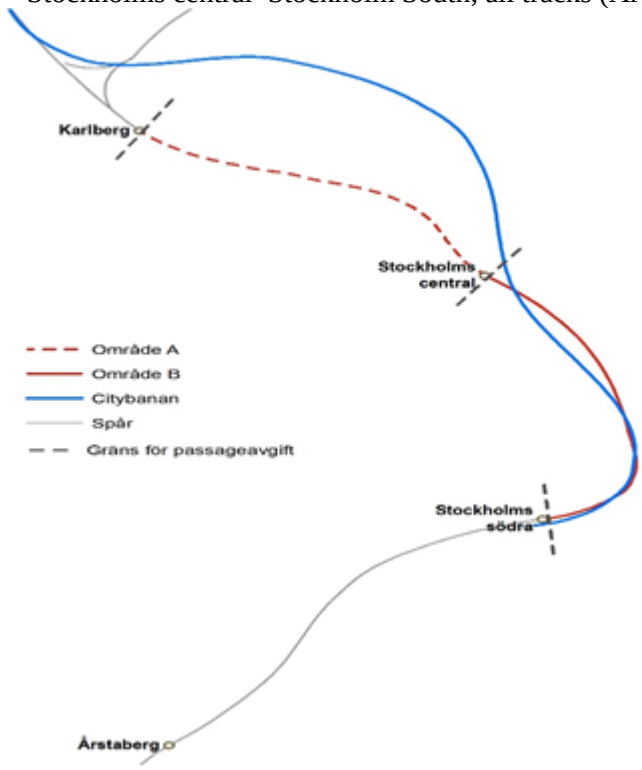
2 Passage charge

Passage charge is imposed for the allocated train paths on parts of the railway network in Stockholm, Göteborg and Malmö on weekdays, Monday-Friday, 06.00–09.00 and 15.00–18.00

2.1 Example Stockholm

In Stockholm, a charge is levied for:

- Stockholms central–Karlberg, all tracks (Area A)
- Stockholms central–Stockholm South, all tracks (Area B).



Examples for Stockholm:

1. A train from Uppsala runs to Norrköping through Stockholms central. The train runs via Karlberg at 6.15 on a non-holiday weekday and will be charged a passage charge (Karlberg, Stockholms central). The train comes to Stockholm and at 6.30 drives continues towards Norrkoping via Stockholm South and is charged an additional passage charge (Stockholms central–Stockholm South). *A total of 2 x passage charges for the train path.*
2. A train from Falun drives towards Stockholms central. The train passes Karlberg at 15.40 on a non-holiday weekday and will be charged a passage charge (Karlberg–Stockholms central). *1 (one) passage charge for the train path.*
3. The train path in example 2 has turned around at Stockholms central and will run a new train path to Falun at 16.05 the same day. At 16.05 on departure, a passage charge will be levied (Stockholms central–Karlberg). *1 (one) passage charge for the train path.*
4. A train from Falun drives towards Stockholms central. The train passes Karlberg at 17.40 on a non-holiday weekday and will be charged a passage

charge (Karlberg–Stockholms central). *1 (one) passage charge for the train path.*

5. The train set in example 4 has turned around at Stockholms central and will run a new train path to Falun at 18.05 the same day. At 18.05 (departure time) a passage charge will not be levied because the train will not be operated in the area for the passage charge within the time when the passage charge is levied. *No passage charge for the train path.*

6. A train from Gävle drives to Linköping via Stockholms central. The train runs via Karlberg at 17.55 on a non-holiday weekday and will be charged a passage charge (Karlberg–Stockholms central). The train arrives at Stockholms central at 18.00 and at 18.05 it leaves for Linköping via Stockholm South. A passage charge will not be levied because the train will not be operated in the area for the train path within the time when the passage charge is levied. *1 (one) passage charge for the train path.*

7. A train from Uppsala drives towards Stockholms central. The train passes Karlberg at 16.08 on a non-holiday weekday and will be charged a passage charge (Karlberg–Stockholms central). Passengers alight at Stockholms central. *1 (one) passage charge for the train path.*

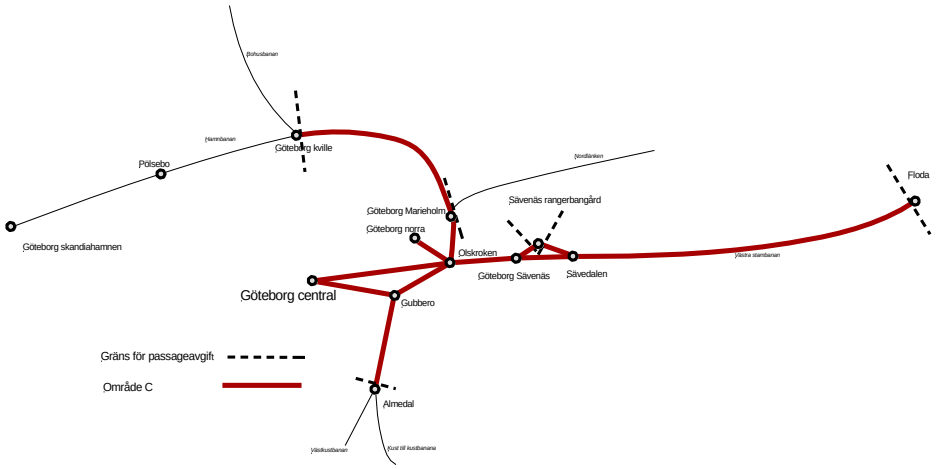
8. The train set in example 7 has turned around at Stockholms central and will run a new train set with another traffic assignment (service train) to Hagalund (depot) at 15.25 the same day and will be charged a passage charge (Stockholms central–Karlberg). *1 (one) passage charge for the train path.*

9. A train from Gothenburg drives towards Stockholms central. The train passes Stockholm South at 15.08 on a non-holiday weekday and will be charged a passage charge (Stockholm South–Stockholms central). The passengers alight at Stockholms central. *1 (one) passage charge for the train path.*

10. The train set in example 9 will run a new train set from Stockholms central with another traffic assignment (service train) to Hagalund (depot) at 15.25 the same day and will be charged a passage charge (Stockholms central–Karlberg). *1 (one) passage charge for the train path.*

2.2 Example Gothenburg

In Gothenburg, a charge is made for all the tracks in an area limited by the "Boundary for passage charge" at Floda, Almedal, Göteborg Kville, Göteborgs Marieholm and Sävenäs marshalling yards (area C).



Examples for Gothenburg:

1. A train from Stockholm is on its way towards Göteborgs central. The train runs via Floda 6.30 a non-holiday weekday. A passage charge is levied as the train passes Floda (Floda–Göteborgs central). *1 (one) passage charge for the train path.*
2. A train from Malmö is on its way to the port of Gothenburg. The train passes Almedal 8.50 and proceeds to the port of Gothenburg via Gubbero, Olskroken and Göteborg Kville. A passage charge is levied (Almedal– Göteborg Kville). *1 (one) passage charge for the train path.*
3. A train runs from Sävenäs marshalling yards 8.45 a non-holiday weekday and a passage charge will be levied. The train runs to the port of Gothenburg. *1 (one) passage charge for the train path.*

2.3 Example Malmö

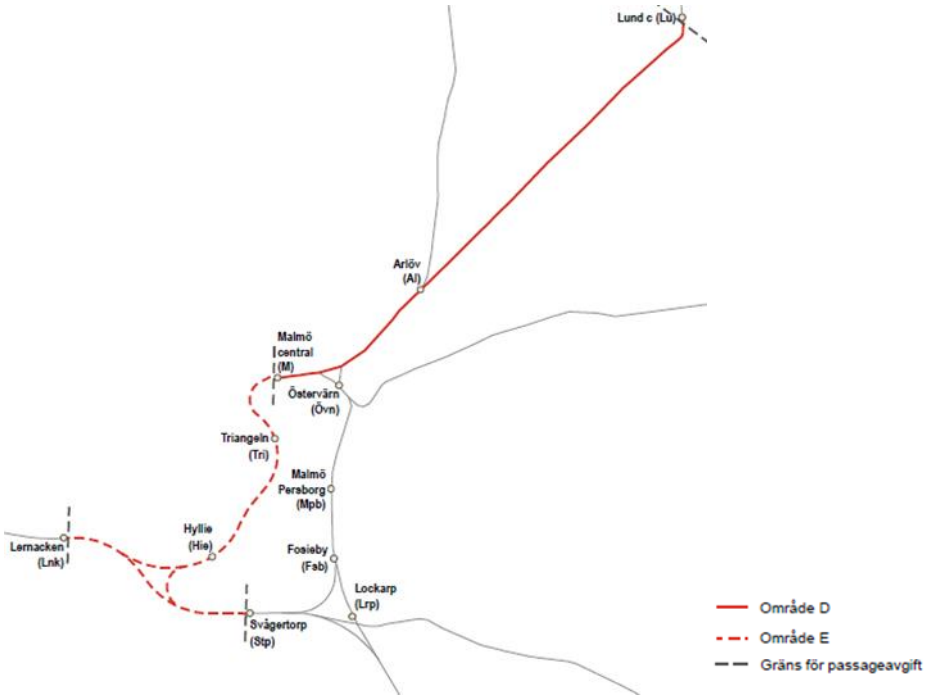
In Malmo, the charge is levied for

- all tracks in an area limited by the "Boundary for passage charge" at Lund and Malmö Central (area D)

For Malmö godsbangård/central-Östervärn will no charge be levied

- Malmö Central–Svågertorp and Lernacken (area E).

If both areas D and E are used, a maximum of two passage charges will be levied per assigned train path.



Examples for Malmo:

1. A train from Stockholm is on its way to Lernacken. The train runs via Lund 7.30 a non-holiday weekday. A passage charge is levied when the train passes Lund (Lund–Malmö Central). The train runs towards Malmo Central, where it continues to the City Tunnel at 8.00. As it passes Malmö Central on the way to the City Tunnel, a further charge is levied (Malmö Central–Lernacken). *A total of 2 x passage charges for the train path.*
2. A train from Gothenburg is on its way to Lernacken. The train runs via Lund 7.30 a non-holiday weekday. A passage charge is levied when the train passes Lund (Lund–Malmö central). The train runs to via Östervärn-Fosieby towards Svågertorp and where it passes Lernacken at 8.00. *2 passage charges for the train path.*
3. A train starts from Malmö godsbangård and drives towards Trelleborg. The train departs 16.05 a non-holiday weekday. No passage charge is levied for the train path on the route Malmö godsbangård-Östervärn, not included in ares D.

3 Emission charge

The emissions charge reflects the socioeconomic costs in terms of environmental and health effects that one additional train movement gives rise to - the costs of discharging carbon dioxide, nitrogen oxides, sulphur dioxide, hydrocarbons and particles. The size of the charge depends on the engine's environmental class and the quantity of fuel consumed.

For engine-powered vehicles, the emission fee is levied as below.

Emission fees	Fee compression-ignition engines		Fee spark-ignition engines	
	SEK/litre (1)	SEK/m3 (2)	SEK/litre (1)	SEK/m3 (2)
Diesel-powered locomotive, base	3,20	3,76	2,14	2,71
Diesel locomotive, environmentally classed stage III A	2,07	2,43	2,07	2,43
Diesel locomotive, environmentally classed stage III B	1,66	1,95	1,66	1,95
Diesel-powered multiple-unit trains, base	3,13	3,68	2,07	2,62
Diesel multiple-unit trains, environmentally classed stage III A	1,72	2,02	1,72	2,02
Diesel multiple-unit trains, environmentally classed stage III B	1,42	1,66	1,42	1,66

[1] Liquid fuel
[2] Gaseous fuel

The amount of litres of diesel fuel used must be reported for all the traffic that takes place on the Swedish Transport Administration's rail network, not just the consumption that takes place when using a train path. For eco-certified vehicles, the vehicle number and amount of diesel fuel in litres consumed per vehicle must be stated on the declaration.

Following examples illustrate how the fee can be calculated.

3.1 Example 1

Locomotive, base

For a locomotive with a non-classified diesel engine (compression ignition) application fee base in SEK / litre of diesel. The vehicle has consumed 400 litres of diesel. The total fee is 400 litres × 3.20 SEK/ litre = 1280 SEK.

3.2 Example 2

Gas-powered multiple-unit train, environmentally classed stage III B

For a gas-powered locomotive with spark-ignition engine with emission limits for class III B, the fee is 1.66 SEK/m3 gas. The vehicle has consumed 320 cubic meters of gas. The total fee is 320 m³ × 1.66 SEK/ m³ = 531,2 SEK.

3.3 Example 3

Dual-fuel powered locomotive, environmentally classed stage III A

For a locomotive with a compression ignition dual-fuel engine application fee for both liquid and gaseous fuels. The vehicle has consumed 160 litres of diesel and 205 cubic metres of gas. The total fee is:

160 litres of diesel × 2,07 SEK/litre + 205 m^3 × 2,43 SEK/m^3 = 829,4 SEK