# 1 Other availability impacts

## 1.1 Other major traffic-impacting engineering works

During the timetable period, a number of major projects are underway that can not be classified as PSBs, or that fulfil the criteria for being PSBs, for which it is deemed impossible to adapt the train path application to. These projects may reduce the available capacity of the infrastructure. Examples of this include reduced track availability and choice of platform. Speed reductions, both temporary and permanent, may also occur. Major traffic disruptions of this type can be expected by the projects and speed reductions at locations as follows:

**The northern region:**

- No projects

**The mid region:**

- Gävle-Samnan, renewal of rail
- Sandviken–Kungsgården, Villersmuren, new operational site
- Fagersta, new signal box
- (Ludvika)-(Fagersta), remote control
- Hedemora-(Avesta/Krylbo), preparation work for renewal of track
- (Säter)-(Hedemora), installation of derailing point as well as parallel movement facility
- Svartvik-Maj-Dingersjö, new operational site
- (Hälsningenybo)-(Loster), renewal of switches Henna
- (Kilafors)-(Holmsveden), renewal of railway yard Röstbo
- Storå-(Frövi), STAX 25

**The eastern region:**

- Huvudsta-Barkaby, engineering works
- Stockholms central-Stockholms södra-Getingmidjan, bridge engineering works
- Västerås, renewal of bridge Tegnergatan
- (Avesta Krylbo)–Broddbo, installation of derailing point as well as parallel movement facility (ESIK)
- Ransta, extension of platform
- (Eskilstuna)–Skogstorp, renewal of switches
- Sommen, renewal of switches
- Hallsberg, new double track, big impact on Västra stambanan and Godsstråket genom Berslagen
- Pålsboda–(Hallsberg), renewal of sleepers
- Åsbro–(Motala), double track Hallsberg–Degerön

**The western region:**

- Kil, autotransformer-system
- Charlottenberg–Åmotfors, grade-separated crossing
- Karlstad, Pråmkanalen
- Varberg–Hamra, double track
- Halmstad–Eldsberga, new tunnel under the railway
- Jönköping–Nässjö, parallel movement facility
- Forserum, tunnel for passengers
- Äng, grade-separated crossing
- Bankeryd, grade-separated crossing
- Bankeryd–Jönköping, grade-separated crossing
- Herrljunga–Borås, remote control
- Göteborgs central, renovation of platform canopy
- Olskroken, grade-separated crossing
- Sävedalen, renewal of switches
- Gårdsjö, renovation of grade-separated crossing
- Varberg, new double track
- Halmstad, the southern entry
- BJ-banan, autotransformer feeder

**The southern region:**

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- Mosselund, renewal of switches
- Osby, renewal of switches
- Tunneby, renewal of switches
- Diö N, renewal of switches
- Älmhult–Olofström, preparation work for renewal of track
- Stehag–Eslöv, improvement of capacity
- Eslöv, new siding, new switches
- Svedala, new tunnel for walking and bicycling
- Malmö godsbangård, storage of locomotives
- Åkarp norra–Arlöv, new multiple track

## 1.2 Pre-planned times in track for maintenance

In order to create scope for necessary preventive maintenance work and measures that need to be taken to defects discovered in the facilities in connection with inspections, the Swedish Transport Administration intends to reserve capacity in the railway network – known as service windows – in accordance with the framework presented below

The configuration of service windows is, among other things, based on experience of maintenance in previous years, knowledge concerning the condition of the network, and assessments of future traffic needs. Presumptive applicants for capacity on the line in question will be consulted regarding the configuration of

these service windows. This will be done in connection with each new procurement of contracts for basic maintenance – i.e., every five to seven years.

In good time before each timetable process, additional consultations will be made with presumptive applicants for capacity. The consultation concerns adjustments of the extent of service windows, and is based in part on the follow-up of the degree of utilisation that will be performed continuously, in part on the expected changes in traffic needs. If the degree of utilisation has been low, the capacity reserved for service windows can be recalled, in part or in full.

The general goal is for more than seventy per cent of the capacity reserved for service windows to be utilised. This is the equivalent of, for example, more than eighty-five per cent of service windows being used, while simultaneously more than eighty-five per cent of the time within these windows is being used.

The requirement for service windows shall be submitted for the timetable process along with the Swedish Transport Administration's other requirements for track engineering works. The detailed coordination and determination of service windows will be done during the ordinary timetable process. There is thus no need to give consideration to these times in with train path applications, but service windows represent the need for maintenance time that the Swedish Transport Administration considers necessary on the basis of the assessment made and that is expected to require capacity in the established timetable. Service windows do not comprise the total capacity required for maintenance work, and additional requirements may be presented by the Swedish Transport Administration. This will be done during the ordinary timetable process.

### 1.2.1 Maintenance contract Malmbanan, north

The Swedish Transport Administration intends, during the spring, winter and autumn to apply for two (2) hours' traffic stoppage in the daytime Monday – Friday, every other week north of Kiruna, every other week south of Kiruna. These times are coordinated with maintenance periods on the Norwegian side of the border.

### 1.2.2 Maintenance contract Norra stambanan

The Swedish Transport Administration intends to apply for two (2) hours' traffic stoppage Monday – Friday on different stretches, as well as six (6) hours in the daytime for four (4) weeks. Except on the stretch of line (Gävle)-Storvik where the Swedish Transport Administration intends to apply for five (5) hours the nights before Sunday as well as four (4) weekends, approximately eight (8) hours per shift the nights before Saterday, Sunday and Monday.

### 1.2.3 Maintenance contract Malmbanan, south and Haparandabanan

At Malmbanan, south, the Swedish Transport Administration intends to apply for 1-2 hours' traffic stoppage in the daytime Monday-Friday even numbered weeks as well as continuous two (2) hours' the nights before Monday-Friday odd numbered weeks. At Haparandabanan the Swedish Transport Administration intends to apply for two (2) hours' traffic stoppage in the daytime Monday-Friday odd numbered weeks.

### 1.2.4 Maintenance contract Botniabanan, Långsele-Vännäs

The Swedish Transport Administration intends to apply for traffic stoppage on 1-5 weekdays for 1-4 hours' per week.

### 1.2.5 Maintenance contract Holmsund – Boden incl cross country lines

The Swedish Transport Administration intends to, at each line section, apply for traffic stoppage on 1-4 weekdays for 1-3 hours per week.

At the cross country lines the Swedish Transport Administration intends to apply for traffic stoppage on weekdays for three (3) hours'.

### 1.2.6 Maintenance contract Ådalsbanan and Mittbanan

The Swedish Transport Administration intends on the stretches of line Storlien–Östersund, Östersund–Bräcke, Bräcke–Ånge, Ånge–Sundsvall, Bräcke–Långsele, Sundsvall–Härnösand and Härnösand–Långsele to apply for traffic stoppage Monday-Sunday for 2–3 weeks comprising about 40 hours as well as four (4) hours' Monday-Friday for four (4) weeks.

### 1.2.7 Maintenance contract Banorna i Bergslagen and Godsstråket

The Swedish Transport Administration intends on the stretches of line Storvik–Borlänge, Borlänge–Frövi, Storvik–Avesta Krylbo, Avesta Krylbo–Frövi, Fagersta–Ludvika and Ställdalen–Hällefors to apply for six (6) hours' traffic stoppage at five occations per week for 2-3 weeks per year.

The Swedish Transport Administration intends on the stretches of line Borlänge–Avesta Krylbo and Mora–Borlänge to apply for six (6) hours' traffic stoppage at five occations per week for 4-5 weeks per year.

The Swedish Transport Administration intends on the stretch of line Frövi–Mjölby to apply for capacity for period of 4-6 hours' the nights before Monday-Friday and on the stretch of line Frövi–Jädersbruk for a period of five (5) hours' in the daytime during 25 Mondays.

### 1.2.8 Maintenance contract Stockholm Mitt, the stretch Stuvsta – Stockholm Central

The Swedish Transport Administration intends to apply for capacity for a period of 4-5 hours the nights before Monday-Friday. During this interval the traffic will be able to run with limited accessibility.

### 1.2.9 Maintenance contract Stockholm Mitt, the stretches Stockholm Central – Sundbyberg, Stockholms Central–Solna, Stockholms central–Älvsjö, Värtabanan and the stretch Årstabron–Älvsjö gods–Älvsjö

The Swedish Transport Administration intends to apply for capacity for a period of 3-6 hours the nights before Monday-Friday. During this interval the traffic will be able to run with limited accessibility.

### 1.2.10 Maintenance contract Citybanan, the stretch Södra station–Tomteboda övre via Stockholm City

The Swedish Transport Administration intends to apply for capacity for a period of 3-4 hours the nights before Monday-Friday. During this interval the traffic will be able to run with limited accessibility.

### 1.2.11 Maintenance contract Hagalund

The Swedish Transport Administration intends to apply for capacity for a period of four (4) hours on Monday-Thursday, int agreed geographic area within Hagalund. During this interval the traffic will be able to run with limited accessibility.

### 1.2.12 Maintenance contract Svealandsbanan

The Swedish Transport Administration intends to apply for capacity for a period of 2-4 hours the nights before Monday-Friday. During this interval the traffic will be able to run with limited accessibility.

### 1.2.13 Maintenance contract Västra stambanan (Hallsberg–Gnesta)

The Swedish Transport Administration intends to apply for capacity for a period of five (5) hours the nights before Monday-Friday.

### 1.2.14 Maintenance contract Södra stambanan (Katrineholm–Arlöv)

The Swedish Transport Administration intends on the stretch of line Katrineholm-Nässjö to apply for capacity for a period of 4-5,5 hours' the nights before Monday-Friday. On the stretch of line (Hässleholm)-Nässjö the Swedish Transport Administration intends to apply for single-track operation during six (6) hours' six(6) days per week and on the stretch of line (Arlöv)-Lund for a period of five (5) hours' the nights before Monday. On the rest of the stretches of the line the Swedish Transport Administration intends to apply for single-track operation for continuous six (6) hours' nights before Tuesday-Friday.

### 1.2.15 Maintenance contract Värmland/Dalsland

The Swedish Transport Administration intends to primarily gather the maintenance under three (3) track engineering works weeks per year and stretch of line, 5 hours' traffic stoppage Monday – Thursday.

### 1.2.16 Maintenance contract Länsbanorna i Östergötland and eastern Småland

The Swedish Transport Administration intends to apply for seven (7) hours of traffic stoppage Tuesday – Thursday on a larger part of those stretches of line that this maintenance contract covers.

### 1.2.17 Maintenance contract Jönköpingsbanan

The Swedish Transport Administration intends to apply for a period of 3-7 hours of traffic stoppage Tuesday – Thursday on a larger part of those stretches of line that this maintenance contract covers.

### 1.2.18 Maintenance contract Västra Götaland, West

The Swedish Transport Administration intends for each stretch of line to apply for traffic stoppage (single-track lines) and single-track operation (double-track lines) for a period of 3-7 hours, 1-5 days per week.

### 1.2.19 Maintenance contract Västkustbanan, West

The Swedish Transport Administration intends for each stretch of line to apply for traffic stoppage (single-track lines) for a period of 5-10 hours', 1-6 days per week and single-track operation (double-track lines) for a period of 3-10 hours', 1-5 days per week.

### 1.2.20 Maintenance contract Västra Götaland Göteborg

The Swedish Transport Administration intends to, at each line section, apply for traffic stoppage (single-track lines) for a period of 4 hours', 1-5 days per week and single track operations (dubble-track lines) for a period of 4 hours during 1-5 weeknights per week, as well as four 8-hours periods of traffic stoppage the nights before Sunday on the stretch of line Alingsås-(Partille).

The Swedish Transport Administration intends to do maintenance at Göteborg signal box area according to an area division developed by the Swedish Transport Administration.

### 1.2.21 Maintenance contract Västra Götaland East

The Swedish Transport Administration intends for each line section to apply for traffic stoppage (single-track lines) for a period of 4-24 hours', 1-7 days per week

and single-track operation (double-track lines) for a period of 4-8 hours', 1-7 days per week.

### 1.2.22 Maintenance contract Västkustbanan south

The Swedish Transport Administration intend to apply for capacity in Hallandsåstunneln for a period of six (6) hours' the nights before Monday-Friday, even numbered weeks will the up-track be closed and odd numbered weeks will the down-track be closed.

The Swedish Transport Administration intend to apply for capacity in Helsingborg on eight (8) occations for a period of eight (8) hours' nights before Sunday. Helsingborg-Helsingborgs godbangård will be closed for traffic at the entry signals, but holding of trains will be possible.

### 1.2.23 Maintenance contract Blekinge kustbana, Kust till kust-banan

The Swedish Transport Administration intends to apply for traffic stoppages in the night time on every weekday for a period of 4-7 hours on the stretch of line Värnamo and Kalmar/Karlskrona, and 3–5 hours in the night time on every weekday on the stretch of line Hässleholm and Karlskrona

### 1.2.24 Maintenance contract Malmö and south-east Skåne

The Swedish Transport Administration intend to apply for:

- traffice stoppages during four (4) hours the nights before Monday on the stretches of line Lockarp-Ystad and Lockarp-Trelleborg
- shutdown of the entire I-group at Malmö godsbangård for ten (10) hours four (4) times a year
- signale-track operation for six (6) hours' the nights before Tuesday–Friday in Citytunneln.

## 1.3 Railway lines where special conditions may apply

In part of the railway network is a heightened risk of prolonged reductions in speed or axle load. These parts are presented below.

| Line with risk of special conditions |
|---|
| 111 (Peuravaara)–Riksgränsen |
| 118 (Boden)–(Gällivare), Koijuvaara–Aitik |
| 153 (Forsmo)–(Hoting) |
| 212 (Ånge)-Bräcke, Moradal |
| 221 (Östersund)–Storlien |
| 235 (Strömsbro)–(Sundsvall) |
| 305 Borlänge rangerbangård |
| 324 (Borlänge)–Ludvika |
| 333 (AvestaKrylbo)–(Hedemora) |
| 340 (Fagersta C)–(Ludvika) |

| |
|---|
| 349 Västerås Norra–Kolbäck |
| 364 (Kristinehamn)–(Nykroppa), (Daglösen)–Filipstad |
| 376 (Repbäcken)–Rågsveden |
| 382 Kil–(Karlstad) |
| 383 (Laxå)–(Karlstad Välsviken) |
| 391 (Grängesberg)-(Ställdalen)-(Frövi) |
| 434 (Uppsala C)–(Gävle) |
| 435 (Örbyhus)-Hallstavik |
| 494 Flens övre–(Eskilstuna C) |
| 524 (Hallsbergs personbangård)–Frövi |
| 601 Almedal–Göteborg C |
| 611 (Falköping)–(Alingsås) |
| 621 (Uddevalla C)–Strömstad |
| 630 Halmstads central |
| 631 Kil–Charlottenberg |
| 652 (Öxnered)–(Håkantorp) |
| 662 (Mellerud)–Billingsfors |
| 710 (Falköping)–(Sandhem) |
| 711 Sandhem–(Nässjö) |
| 721 (Borås)–(Värnamo) |
| 731 (Jönköpings godsbangård)–Vaggeryd |
| 732 (Nässjö)–(Värnamo)–(Landeryd) |
| 733 Landeryd–(Furet) |
| 831 (Nässjö)–(Hultsfred) |
| 832 Hultsfred–Berga |
| 851 (Älmhult)–Olofström |
| 913 (Lockarp)–(Trelleborg) |
| 926 (Helsingborgs godsbangård)–Teckomatorp |

**Line section 111 (Peuravaara)–Riksgränsen**
The bridge Rautasjokk south, km 1432+883: There is a risk of prolonged restrictions of axle load and speed owing to carrying capacity problem.

**Line section 118 (Boden)–(Gällivare), Koijuvaara–Aitik**
Holmfors–Ljuså, km 1158+400 – 1161+392: There is a risk of prolonged restriction to 40 km/h for iron ore train owing to poor track.

Harrträsk–Gällivare, km 1299+985 – 1312+288: There is a risk of prolonged restriction to 40 km/h for iron ore train owing to poor rails.

**Line section 153 (Forsmo)–(Hoting)**
The bridge over Rörströms river between Betåsen and Ådalsliden km 96+466 – 96+552: There is a risk of prolonged restrictions of axle load and speed due to carrying capacity problem.

The bridge over Fjällsjö river north of Rossön km 34+198 – 34+366: There is a risk of prolonged restrictions of axle load and speed owing to carrying capacity problem.

**Line section 212 (Ånge)-Bräcke, Moradal**
There is a risk of prolonged restriction to 40 km/h owing to poor switches.

**Line section 221 (Östersund)–Storlien**
The strech Storlien-the border, km 747+602 – 750+298: There is a risk of prolonged restriction to 40 km/h owing to poor track.

**Line section 235 (Strömsbro)–(Sundsvall)**
The stretch Gävle–Vallvik, km 117+440 – 178+712: There is a risk of prolonged restriction to 140 km/h owing to poor track.

**Line section 305 Borlänge marshalling yard**
The bridge over the river Dalälven at Domnarvet, siding No 103, km 21+750: There is a risk of prolonged restrictions of axle load and speed due to carrying capacity problem.

**Line section 324 (Borlänge)–Ludvika**
Ludvika–Ulvshyttan, km 69+632 – 45+632: There is a risk of prolonged restriction to 140 km/h owing to poor track.

**Line section 333 (Avesta Krylbo)-(Borlänge)**
Avesta/Krylbo–Hedemora, km 0+355 – 23+297: There is a risk of prolonged restriction to 100 km/h owing to poor track.

**Line section 340 (Fagersta C)–(Ludvika)**
Fagersta C–Ludvika, km 167+455 – 212+049: There is a risk of prolonged restriction to 70 km/h owing to poor track.

**Line section 349 Västerås norra–Kolbäck**
Västerås Norra-Kolbäck up track km 111+226 - 114+365, and down track km 111+368 - 114+120: There is a risk of prolonged restriction to 140 km/h owing to poor rails.

The bridge over the road E18 Västerås (Tegnérgatan), up track and down track, km 109+499: There is a risk of prolonged restrictions of axle load and speed.

**Line section 364 (Kristinehamn)–(Nykroppa), (Daglösen)–Filipstad**
Kristinehamn–Storfors, km 0+500 – 9+350: There is a risk of prolonged restriction to 80 km/h owing to poor track.

Kristinehamn–Storfors, km 12+285 – 28+140: There is a risk of prolonged restriction to 80 km/h owing to poor track.

**Line section 376 (Repbäcken)–(Rågsveden)**
Repbäcken–Rågsveden, km 30+784 – 162+119: There is a risk of prolonged restriction to 40 km/h.

**Line section 382 och 383 Kil–(Laxå)**
Laxå-Kil, km 228+036 – 350+300: There is a risk of greater restrictions for heavy transport and the risk of prolonged speed reduction to 140 km/h owing to poor rails.

**Line section 391 (Grängesberg)–(Ställdalen)–(Frövi)**
Silverhöjdspåret, km 463+258 – 480+962: There is a risk of prolonged restriction to 40 km/h.

**Line section 434 (Uppsala C)–(Gävle)**
Storvreta–Gävle, up track km 14+982 – 113+481: There is a risk of speed reduction to 140 km/h owing to poor rails.

**Line section 435 (Örbyhus) –Hallstavik**
The bridge Örbyhusån, towards Hallstavik, km 0+485: There is a risk of prolonged restrictions of axle load and speed owing to carrying capacity problem.

**Line section 494 Flens övre–(Eskilstuna C)**
Flens övre–Eskilstuna, km 62+825 – 100+360: There is a risk of prolonged speed reduction to 70 km/h owing to poor track.

**Line section 524 (Hallsbergs personbangård)–Frövi**
Örebro–Frövi, up track, km 225+360 – 249+157 and down track km 224+725 – 249+157: There is a risk of prolonged speed reduction to 120 km/h owing to poor rails.

**Line section 611 (Falköping)–(Alingsås)**
The bridge over the river Nossan at Herrljunga (in the direction of Håkantorp), km 89+846 – 89+890: There is a risk of prolonged restrictions of axle load and speed owing to carrying capacity problem.

**Line section 621 (Uddevalla C)–Strömstad**
Uddevalla–Överby, km 89+590 – 166+050: There is a risk of speed reduction to 80 km/h owing to poor track.

Overdecking of the road portal in Munkedal (Vadholmsvägen), km 109+777: There is a risk of prolonged restrictions of axle load and speed owing to carrying capacity problem.

**Line section 631 Kil–Charlottenberg**
The bridge over the river Norsälven between Kil and Fagerås, km 353+85 – 353+263: There is a risk of prolonged restrictions of axle load and speed owing to carrying capacity problem.

**Line section 652 (Öxnered)–(Håkantorp)**
The bridge over Trollhätte channel in Vänersborg, km 25+609: There is a risk of prolonged restrictions of axle load and speed.

**Line section 662 (Mellerud)–Billingsfors**
Mellerud–Billingsfors, km 0+820 – 38+103: There is a risk of prolonged speed reduction to 40 km/h owing to poor track.

**Line section 710 och 711 (Falköping)–(Nässjö)**
Falköping–Bankeryd, km 0+644 – 25+271, and km 38+080 – 60+0409: There is a risk of speed reduction to 140 km/h owing to poor rails.

Bankeryd–Jönköping, km 60+409 – 66+820: There is a risk of speed reduction to 100 km/h (at some places 40 km/h) owing to poor track.

**Line section 721 (Borås)–(Värnamo)**
Borås–Hillared, km 72+363 – 93+742: There is a risk of prolonged speed reduction to 80 km/h owing to poor track.

**Line section 731 (Jönköpings godsbangård)–Vaggeryd**
Månsarp–Vaggeryd, km 22+925 – 37+898: There is a risk of prolonged speed reduction to 40 km/h owing to poor track.

**Line section 732 (Nässjö)–(Värnamo)–(Landeryd)**
Värnamo–Landeryd, km 83+766 – 134+750:There is a risk of prolonged speed reduction to 80 km/h owing to poor track.

The two bridges in Malmbäck, km 20+46 samt 20+224: There is a risk of prolonged restrictions of axle load and speed owing to carrying capacity problem.

**Line section 733 Landeryd–(Furet)**
Oskarström–Åled, km 176+840 – 184+671: There is a risk of speed reduction to 40 km/h owing to poor track.

**Line section 831 (Nässjö)–(Hultsfred)**
Eksjö–Hultsfred, km 21+039 – 82+561: There is a risk of speed reduction to 40 km/h owing to poor track.

**Line section 832 Hultsfred–Berga**
Hultsfred–Berga, km 82+561 – 93+000 and km 102+480 – 120+705: There is a risk of speed reduction to 80 km/h owing to poor track.

**Line section 851 (Älmhult)–Olofström**
Älmhult–Olofström, km 1+985 – 42+112: There is a risk of speed reduction to 40 km/h owing to poor track.

**Line section 913 (Lockarp)–(Trelleborg)**
Lockarp–Trelleborg, km 627+061 – 648+055: There is a risk of speed reduction to 140 km/h owing to poor track.

**Line section 926 (Helsingborgs godsbangård)–Teckomatorp**
Helsingborg–Teckomatorp, km 3+350 – 33+626: There is a risk of speed reduction to 100 km/h (at some places 40 km/h) owing to poor track.