Passenger and Freight Rail Performance 2018-19 Q1 Statistical Release

Publication date: 20 September 2018

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Background

This release contains information on passenger and freight rail performance in Great Britain with the latest quarterly data referring to April, May, June 2018.

All data in this release are sourced from Network Rail. Passenger performance is assessed using two measures: **Public Performance Measure (PPM)** and **Cancellations and Significant Lateness (CaSL)**.

In addition to the PPM and CaSL data in this release, **delay minute data** are published quarterly on the Data Portal.

The **Freight Delivery Metric (FDM)** is the primary measure of freight performance in Great Britain.

Contents

Nationally, **86.9% of trains were on time in the year ending Q1 2018-19 (Public Performance Measure (PPM)** moving annual average (MAA)).

PPM MAA - 2018-19 Q1		Compared with 2017-18 Q1
National (GB)	86.9%	-1.2 pp
Regional and Scotland	88.3%	-2.9 pp
London and South East	86.4%	0.4 pp
Long Distance	83.4%	-4.1 pp

The **proportion of trains Cancelled or Significantly Late (CaSL) in the year ending Q1 2018-19 was 4.2%** (CaSL MAA).

CaSL MAA - 2018-19 Q1		Compared with 2017-18 Q1
National (GB)	4.2%	0.6 pp
Regional and Scotland	3.3%	1.0 pp
London and South East	4.5%	0.2 pp
Long Distance	6.6%	1.9 pp

The **national Freight Delivery Metric (FDM) was 93.3% in the year ending Q1 2018-19** (FDM MAA).

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Public Performance Measure (PPM) and Cancellations and Significant Lateness (CaSL)

This release contains information on passenger and freight rail performance in Great Britain since 1997-98. The latest data in this release refer to Q1 of 2018-19 (1 April to 30 June 2018).

Punctuality (PPM) and Reliability (CaSL) are judged against what is known as the plan of the day. The train operator and Network Rail confirm this at 22:00 on the previous evening. Trains removed from the railway systems before this time are excluded from the PPM and CaSL calculations.

For further information on the collection of this data, please refer to Annex 2.

Public Performance Measure (PPM) is a measure of **Punctuality**. It is the proportion of trains that arrive at their final destination on time. On time is defined as arriving at the destination within five minutes of the planned timetable for London and South East, Regional and Scotland operators, or within ten minutes for Long Distance operators. The **moving annual average (MAA)** reflects the proportion of trains on time in the past 12 months. In Q4, the MAA also represents the PPM for the financial year.

A higher PPM score indicates higher performance.

Cancellations and Significant Lateness (CaSL) is a measure of **Reliability**. It captures the percentage of trains that have caused significant disruption to at least some passengers. The **moving annual average (MAA)** reflects the proportion of trains cancelled or significantly late in the past 12 months. In Q4, the MAA also represents the CaSL for the financial year.

A lower CaSL score indicates higher performance.

A train is considered to be **significantly late** if it calls at all booked stations, completes its entire booked journey and arrives between 30 and 119 minutes after the scheduled arrival time at the final destination.

A train is considered to be a **part cancellation** if it covers more than half the scheduled mileage and either failed to run the whole journey or failed to stop at one or more scheduled stations on the way. Trains completing their scheduled journey but arriving at their final destination late by 120 minutes or more also count as part cancellations.

A train is considered to be a **full cancellation** if it covers less than half the scheduled mileage, or does not run at all.

A train that fails CaSL also fails PPM.

Delay Minutes, PPM Failures and CaSL Failures

Delay incidents producing **three or more minutes** of delay on Britain's railways are attributed to either Network Rail or a train operator. As well as infrastructure and operational delays such as signal failures and overrunning engineering works, delays caused by external factors such as severe weather, vandalism, cable theft and trespass are also attributed to Network Rail. This is because they are considered best placed to mitigate for such incidents.

A **PPM failure** is when a passenger train does not arrive at its final destination within five minutes of its scheduled arrival time (within ten minutes for Long Distance services). Delay minutes are used to apportion responsibility for PPM failures and can be split between multiple causes of delay. It is not possible to attribute every part of every PPM failure to specific delay minutes. These components of PPM failures remain unmapped.

A **CaSL failure** is when a passenger train does not arrive at its final destination within 30 minutes of its scheduled arrival time and/or is cancelled either in full or in part. Delay minutes and other intelligence are used to apportion responsibility for CaSL failures and can be split between multiple causes of delay. It is not possible to attribute every part of every CaSL failure to specific delay minutes. These components of CaSL failures remain unmapped.

We currently publish limited Network Rail caused delay minute data in Table 3.46 on the Data Portal. Further delay minute, PPM failure and CaSL failure data are published on the ORR website. These tables are updated twice a year in November and April.

Network Rail attributed delays are also available in the Annual Return which reports Network Rail achievements, developments and challenges for each financial year and the historical record of Network Rail stewardship on the Network Rail website.

New Passenger Rail Performance Measures

The rail industry has developed a new set of performance measures to monitor punctuality and reliability of passenger trains: **Train Punctuality at recorded station stops**, **Cancellations**, and **Severe Disruption**. Periodic data for these measures are published in tables 3.65, 3.66 and 3.67 on the data portal.

A factsheet with a summary of performance against these measures for the year 2017-18 can be found under *Factsheets* on the statistical release page of the ORR website: **Train punctuality, cancellations, and severe disruption.**

1. National Performance

Overall, the punctuality of GB rail services has worsened in the first quarter of 2018-19, compared with both the same quarter a year earlier, and with the year ending Q1 2017-18. The reliability of GB rail services has also worsened, compared with both the same quarter a year earlier, and with the year ending Q1 2017-18.

National Punctuality (PPM) in Q1 was 87.0%. This has worsened by 3.7 pp compared with Q1 in 2017-18. The MAA stands at 86.9%, a decrease of 1.2 pp compared with the Q1 2017-18 MAA, and is the lowest quarterly PPM MAA since Q4 2005-06.

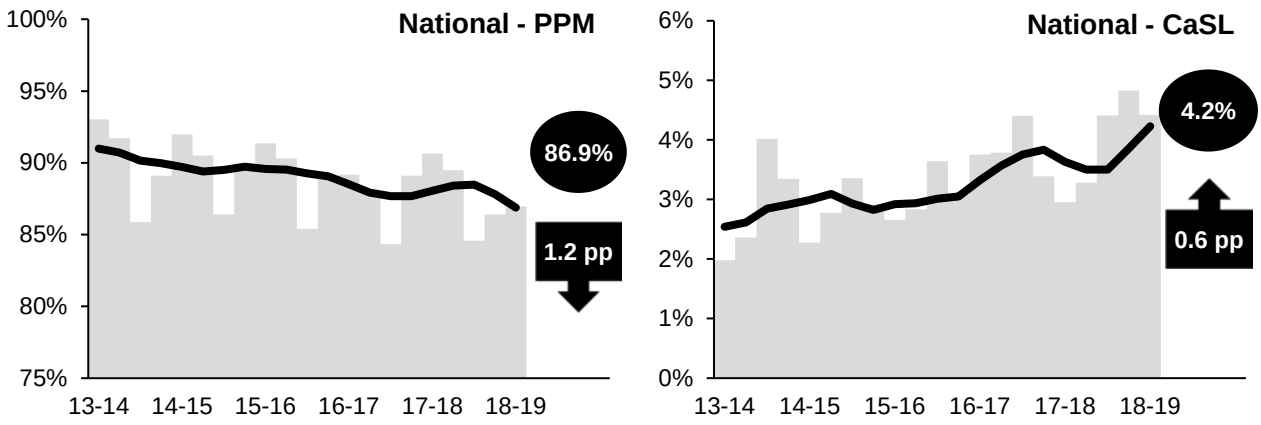
National Reliability (CaSL) in Q1 was 4.4%. This has worsened (increased) by 1.5 pp compared with Q1 in 2017-18. The MAA stands at 4.2%, an increase of 0.6 pp compared with the Q1 2017-18 MAA.

London and the South East was the only sector to see a year-on-year improvement in PPM MAA. All sectors had a year-on-year worsening in CaSL MAA.

The Timetable change in May 2018 caused disruption on the network, particularly for Northern Rail services. For further information on the disruption caused by the timetable change, please refer to Annex 3. GTR was also affected significantly by this change.

The worsening in the punctuality of Northern contributed a decrease of 1.2 pp to the National PPM in Q1 of 2018-19. The combined punctuality of all other operators contributed a 2.5 pp decrease, leaving an overall decline in the National PPM of 3.7 pp. Likewise, Northern contributed -0.6 pp to the National PPM MAA, and as all other operators also contributed a 0.6 pp decrease, this left an overall decline in the National PPM MAA of 1.2 pp. More information on these calculations of the relative contribution of train operators to national performance can be found in the previous statistical releases in this series.

Figure 1.01: PPM and CaSL, National, 2013-14 Q1 to 2018-19 Q1
(change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



2. Sector Performance

London and South East Sector

2018-19 Quarter 1 Headlines:

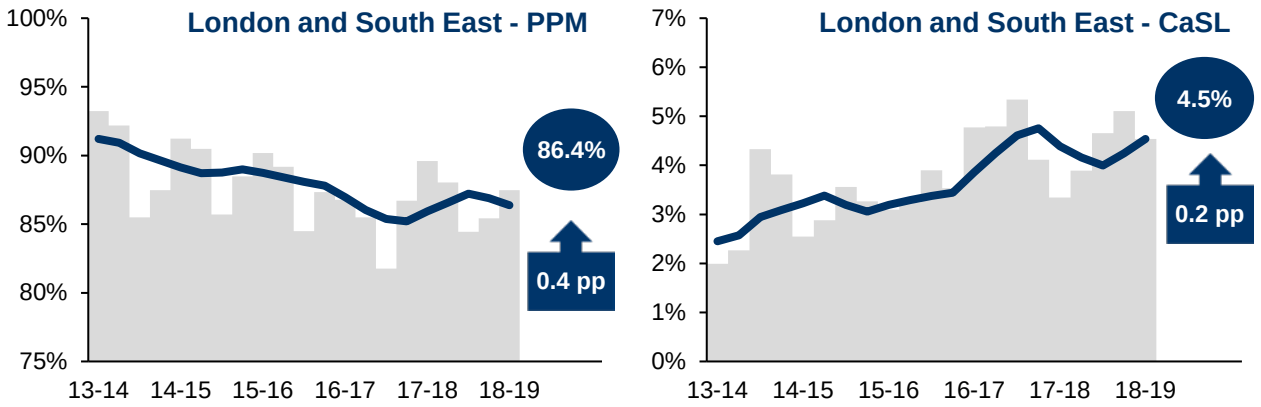
- The lowest Great Western Railway Q1 punctuality (82.0%) since 2004-05, with PPM failures attributed to GWR Fleet delays up by 64% year-on-year.
- The highest (worst) Southeastern Q1 reliability (4.1%) since the time series began in 1997-98, with CaSL failures attributed to severe weather up by 287% year-on-year.
- The lowest South Western Railway punctuality MAA (83.9%) for any quarter since 2004-05, with PPM failures attributed to track causes up by 38% year-on-year.
- An improvement in Chiltern Railways Q1 punctuality (94.1%) of 1.5 pp year-on-year.

Performance

Punctuality (PPM) in the London and South East sector in Q1 was 87.5%. This has worsened by 2.1 pp compared with Q1 in 2017-18. The MAA stands at 86.4%, an improvement of 0.4 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in the London and South East sector in Q1 was 4.5%. This has worsened by 1.2 pp compared with Q1 in 2017-18. The MAA stands at 4.5%, which has worsened by 0.2 pp compared with the Q1 2017-18 MAA.

Figure 2.01: PPM and CaSL, London and South East Sector, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information

- Services to and from London termini and other services in South East England.

Regional and Scotland Sector

2018-19 Quarter 1 Headlines:

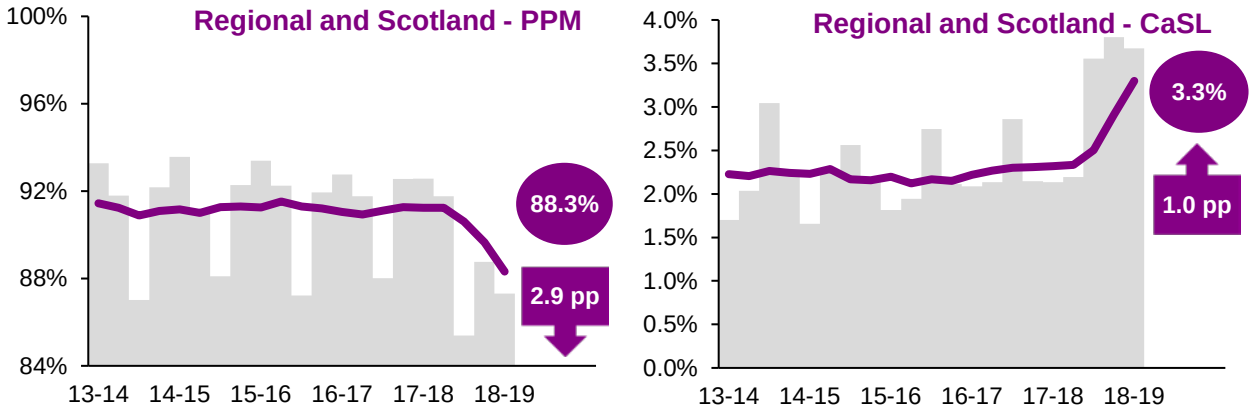
- The lowest Northern quarterly punctuality (81.0%), and the lowest Northern punctuality MAA (85.6%), for any quarter since the time series began in 2009-10.
- The lowest West Midlands Trains Q1 punctuality (87.9%) since 2005-06.
- The highest (worst) ScotRail Q1 reliability (2.9%) since the time series began in 1997-98, with CaSL failures attributed to Severe Weather up by 347% year-on-year.
- The lowest East Midlands Trains Q1 punctuality (91.4%) since 2008-09.

Performance

Punctuality (PPM) in the Regional and Scotland sector in Q1 was 87.3%. This has worsened by 5.3 pp compared with Q1 in 2017-18, and is the worst Q1 PPM since 2005-06. The MAA stands at 88.3%, which has worsened by 2.9 pp compared with the Q1 2017-18 MAA, and is the lowest Q1 MAA since 2007-08.

Reliability (CaSL) in the Regional and Scotland sector in Q1 was 3.7%. This has worsened by 1.5 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since the time series began in 2003-04. The MAA stands at 3.3%, which has worsened by 1.0 pp compared with the Q1 2017-18 MAA.

Figure 2.02: PPM and CaSL, Regional and Scotland Sector, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information

- Rural services outside of London and the South East of England.
- Non-Long Distance services within and between metropolitan areas such as Bristol, Birmingham, Manchester, Liverpool, Sheffield, Leeds and Newcastle-upon-Tyne.
- Services provided by Arriva Trains Wales and ScotRail.

Long Distance Sector

2018-19 Quarter 1 Headlines:

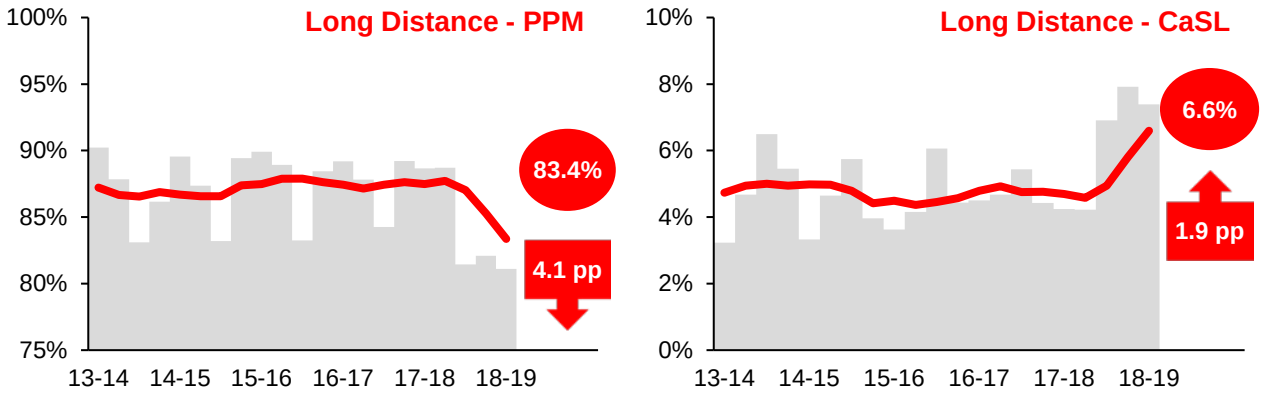
- The lowest London North Eastern Railway (formerly Virgin Trains East Coast) Q1 punctuality (75.3%) since 2002-03.
- The highest (worst) TransPennine Express quarterly reliability (11.3%) for any quarter since the time series began in 2009-10.
- The lowest Virgin Trains West Coast Q1 punctuality (85.0%) since 2009-10.
- The lowest CrossCountry Q1 punctuality (84.9%) since 2005-06, with PPM failures attributed to Points and Signals failures up by 50% year-on-year.

Performance

Punctuality (PPM) in the Long Distance sector (figures do not include Caledonian Sleeper) in Q1 was 81.1%. This has worsened by 7.6 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2004-05. The MAA stands at 83.4%, which has worsened by 4.1 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in the Long Distance sector in Q1 was 7.4%. This has worsened by 3.1 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since 2003-04. The MAA stands at 6.6%, which has worsened by 1.9 pp compared with the Q1 2017-18 MAA.

Figure 2.03: PPM and CaSL, Long Distance Sector, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)

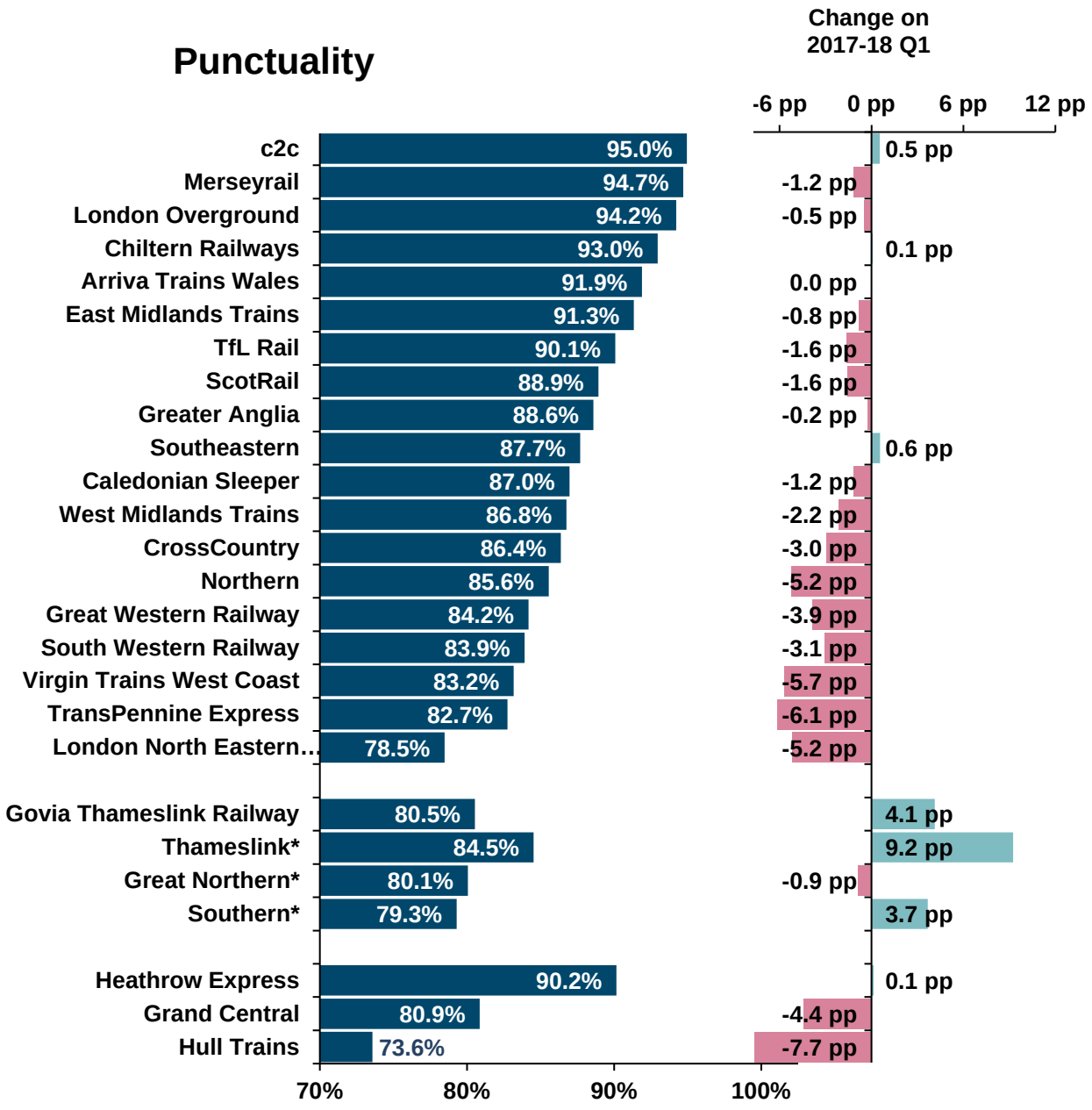


Route Information

- Long distance services between metropolitan areas such as London, Bristol, Norwich, Birmingham, Manchester, Liverpool, Sheffield, Leeds and Newcastle-upon-Tyne.
- The Caledonian Sleeper franchise is let by Transport Scotland. It is not officially part of the Long Distance sector and is not included in the overall figures. It has an entry at the end of section 3.

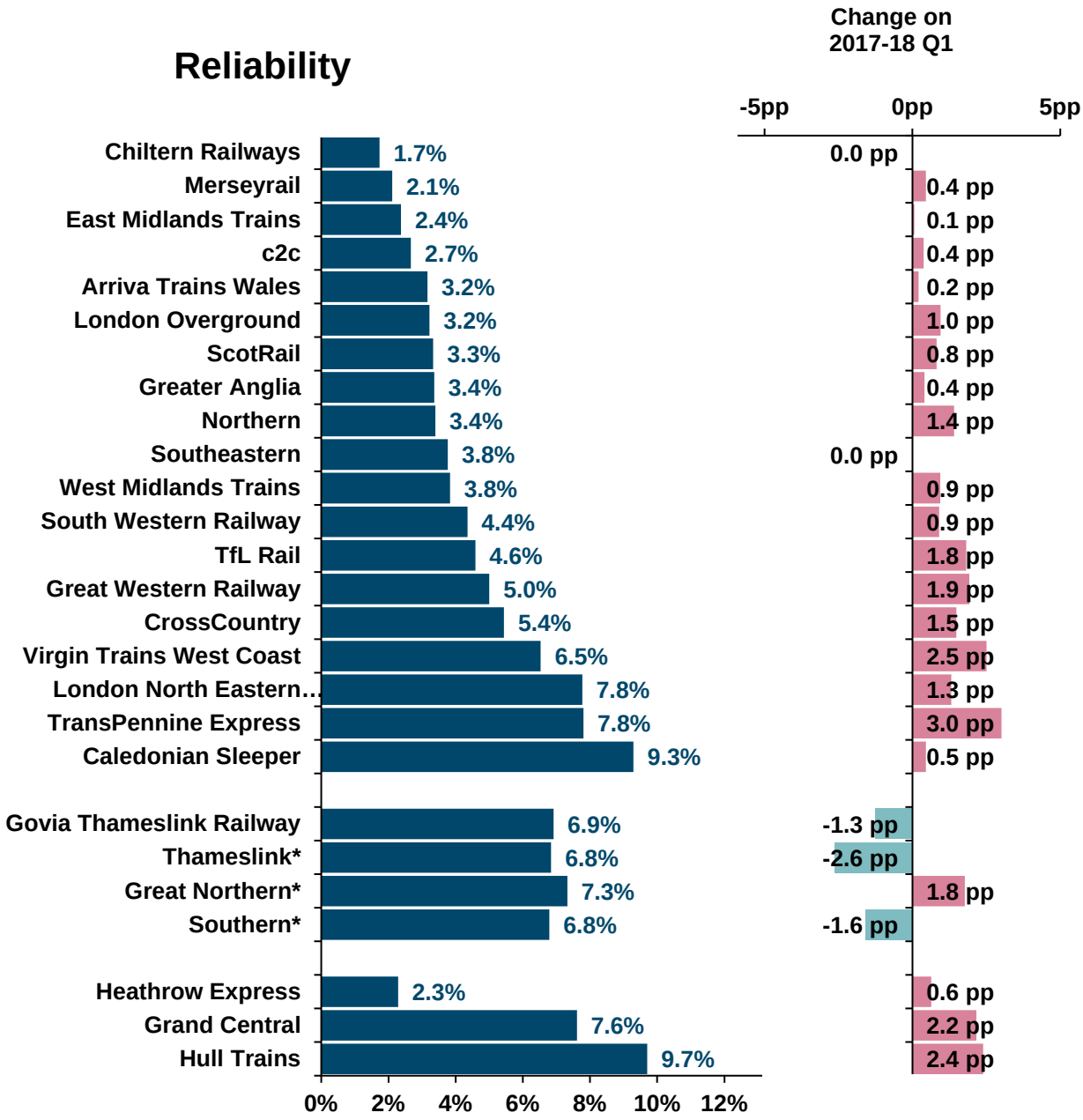
3. TOC Performance

Figure 3.01: PPM MAA by TOC, Great Britain, 2018-19 Q1 change on 2017-18 Q1



*Thameslink, Great Northern, Southern are sub-operators of Govia Thameslink Railway

Figure 3.02: CaSL MAA by TOC, Great Britain, 2018-19 Q1 change on 2017-18 Q1



*Thameslink, Great Northern, Southern are sub-operators of Govia Thameslink Railway

Arriva Trains Wales

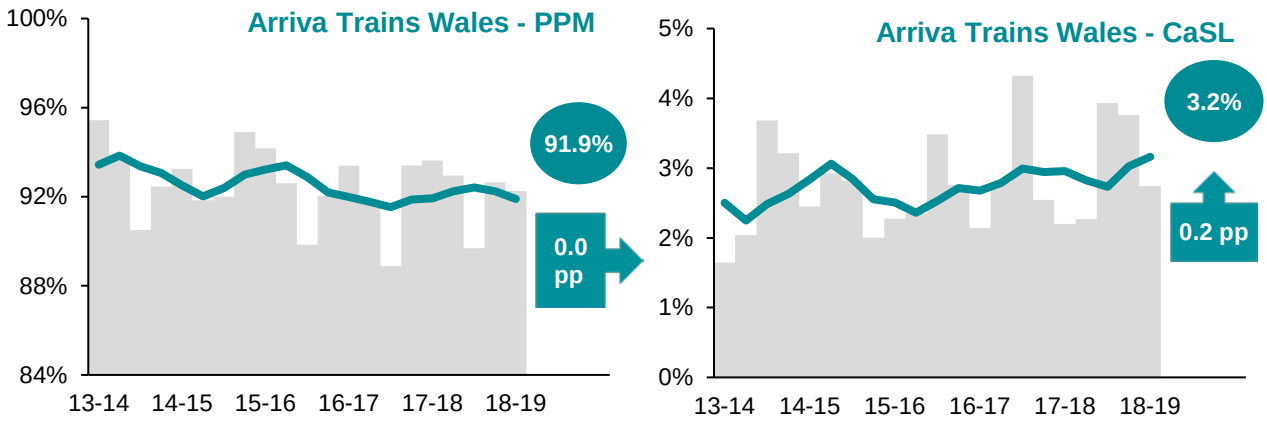
Punctuality (PPM) in Q1 was 92.3%. This has worsened by 1.4 pp compared with Q1 in 2017-18. The MAA stands at 91.9%, the same as the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 2.7%. This has worsened by 0.5 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since 2006-07. The MAA stands at 3.2%, which has worsened by 0.2 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to Arriva Trains Wales increased by 33% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 35% in PPM failures attributed to Fleet delays.

External Infrastructure damage at Newport in Q1 2018-19 caused 6,900 delay minutes to all operators.

Figure 3.03: PPM and CaSL, Arriva Trains Wales, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Regional)

- Services between Birmingham and Shrewsbury, Aberystwyth, Pwllheli, Chester and Holyhead.
- Services between Swansea and Shrewsbury (via the Heart of Wales line) and Holyhead.
- Services between Holyhead and Manchester, Chester and Crewe.
- Services between Cardiff and the Valleys.

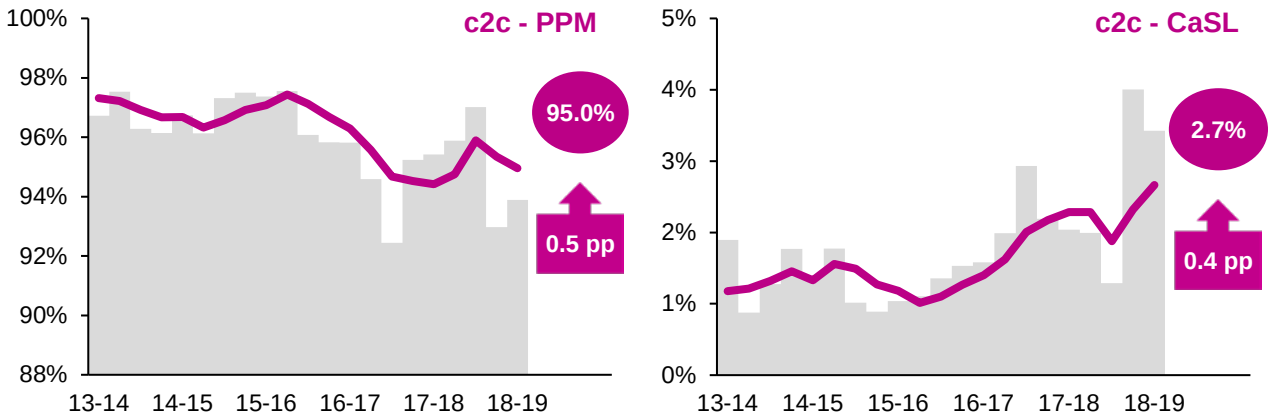
c2c

Punctuality (PPM) in Q1 was 93.9%. This has worsened by 1.5 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2004-05. The MAA stands at 95.0%, which has improved 0.5 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 3.4%. This has worsened by 1.4 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since 2003-04. The MAA stands at 2.7%, which has worsened by 0.4 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to Network Rail increased by 86% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to External causes (up 130%), and Network Rail's management of the network (up 149%).

Figure 3.04: PPM and CaSL, c2c, 2013-14 Q1 to 2018-19 Q1
(change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- Services between London Fenchurch Street and Grays, Tilbury, Southend, and Shoeburyness.

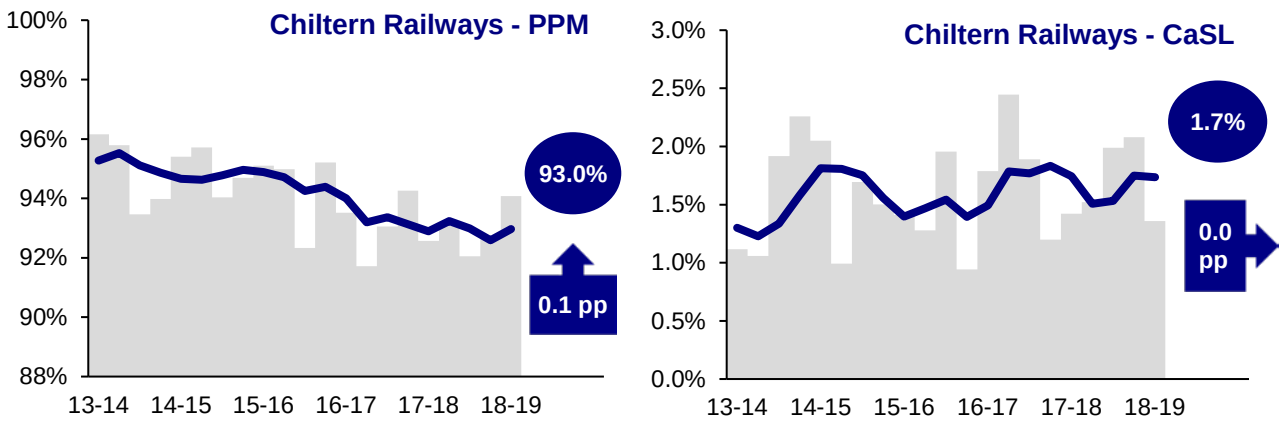
Chiltern Railways

Punctuality (PPM) in Q1 was 94.1%. This has improved by 1.5 pp compared with Q1 in 2017-18. The MAA stands at 93.0%, which has improved by 0.1 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 1.4%. This has improved by 0.1 pp compared with Q1 in 2017-18. The MAA stands at 1.7%, the same as the Q1 2017-18 MAA.

PPM failures attributed to Chiltern Railways decreased by 27% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to decreases in PPM failures attributed to Fleet delay (down 23%), and Other TOC causes (down 58%).

Figure 3.05: PPM and CaSL, Chiltern Railways, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- Services between London Marylebone and High Wycombe, Aylesbury, Oxford, Banbury, Birmingham, and Kidderminster.
- Services between Leamington and Birmingham and Stratford-upon-Avon.

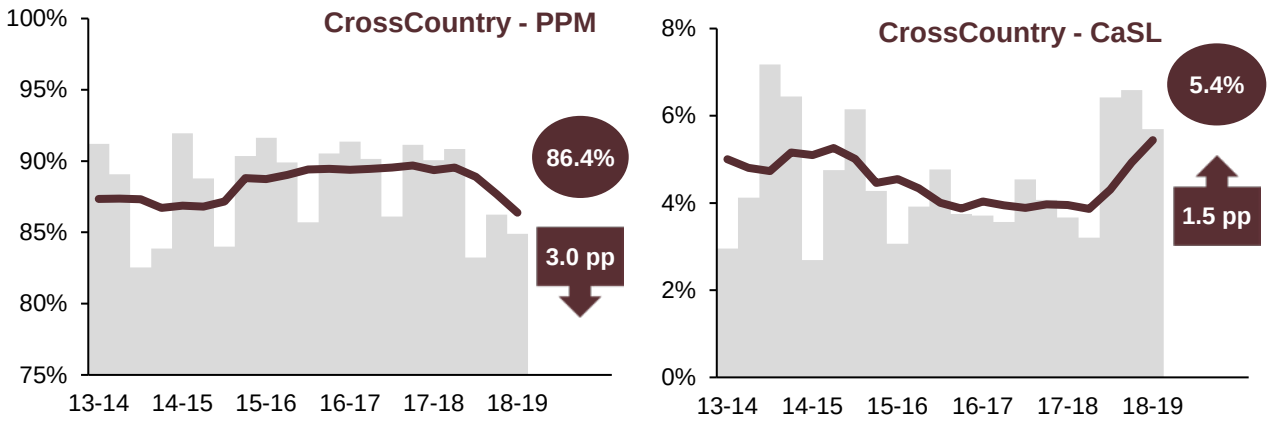
CrossCountry

Punctuality (PPM) in Q1 was 84.9%. This has worsened by 5.1 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2005-06. The MAA stands at 86.4%, which has worsened by 3.0 pp compared with the Q1 2017-18 MAA, and is the lowest PPM MAA for any quarter since Q3 2007-08.

Reliability (CaSL) in Q1 was 5.7%. This has worsened by 2.0 pp compared with Q1 in 2017-18. The MAA stands at 5.4%, which has worsened by 1.5 pp compared with the Q1 2017-18 MAA, and is the highest (worst) Q1 CaSL MAA since 2008-09.

PPM failures attributed to Network Rail increased by 62% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 83%), and Points and Signals failures (up 50%).

Figure 3.06: PPM and CaSL, CrossCountry, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Long Distance)

- Services between Plymouth and Glasgow/Edinburgh.
- Services between Southampton and Newcastle-upon-Tyne.
- Services between Manchester and Bristol and Bournemouth.
- Services between Cardiff and Nottingham, and between Birmingham and Stansted and Leicester.

East Midlands Trains

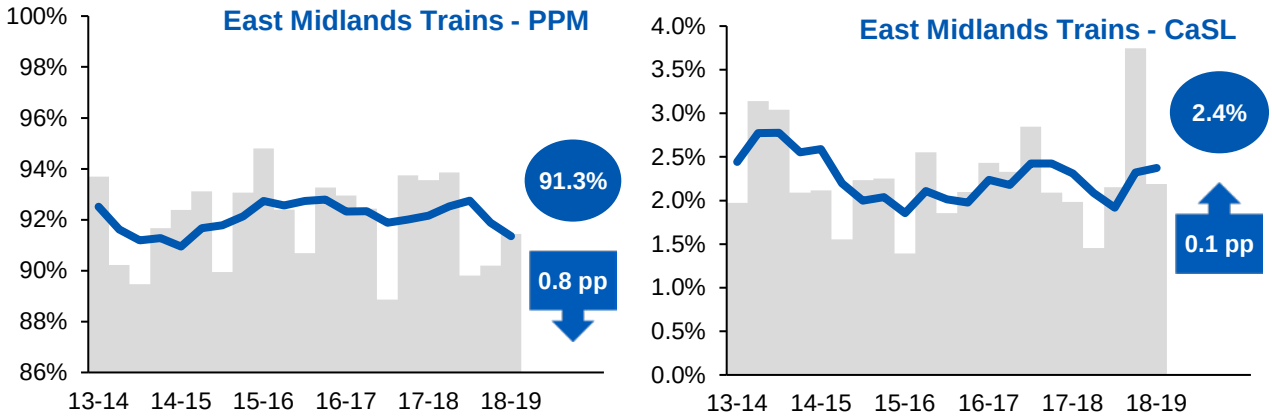
Punctuality (PPM) in Q1 was 91.4%. This has worsened by 2.1 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2008-09. The MAA stands at 91.3%, which has worsened by 0.8 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 2.2%. This has worsened by 0.2 pp compared with Q1 in 2017-18. The MAA stands at 2.4%, which has worsened by 0.1 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to other TOCs increased by 126% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Fleet delay (up 67%), and TOC operations (up from 17 to 136 failures).

PPM failures attributed to Network Rail increased by 19% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 75%), and Points and Signals failures (up 18%).

Figure 3.07: PPM and CaSL, East Midlands Trains, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Regional)

- Local services in the East Midlands and Yorkshire and the Humber

Route Information (Long Distance)

- Services between London St Pancras and East Midlands and Yorkshire and the Humber
- Services between Norwich and Liverpool.

Govia Thameslink Railway

Punctuality (PPM) in Q1 was 81.3%. This has worsened by 3.1 pp compared with Q1 in 2017-18, and is the second lowest Q1 PPM since the time series began in 2004-05 (after 2016-17). The MAA stands at 80.5%, which has improved by 4.1 pp compared with the Q1 2017-18 MAA.

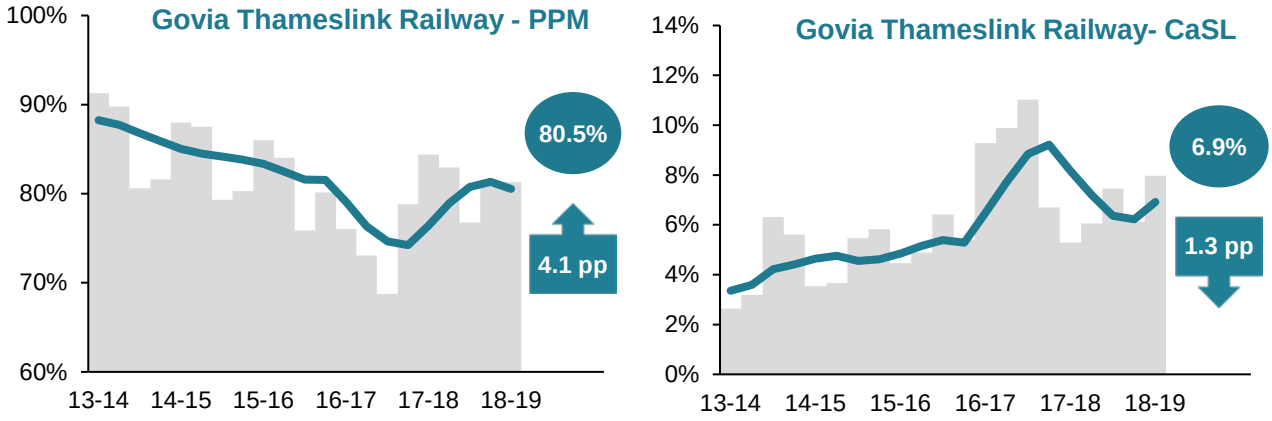
Reliability (CaSL) in Q1 was 8.0%. This has worsened by 2.7 pp compared with Q1 in 2017-18. The MAA stands at 6.9%, which has improved by 1.3 pp compared with the Q1 2017-18 MAA, although this is still the second highest (worst) Q1 CaSL MAA since the time series began in 2004-05 (after 2017-18).

PPM failures attributed to GTR increased by 55% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 146% in PPM failures attributed to Train Crew causes.

CaSL failures attributed to GTR increased by 85% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 225% in CaSL failures attributed to Train Crew causes. These increases occurred around the time of the timetable change in May 2018.

There were a number of incidents in Q1 2018-19 which caused considerable delay including: External fatalities/trespass between North Kent East Junction and Lewisham (14,700 delay minutes to all operators); and a Power fault between Alexandra Palace and Finsbury Park (6,400 delay minutes to all operators).

Figure 3.08: PPM and CaSL, Govia Thameslink Railway, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- Services between London Victoria/London Bridge and South London and Sussex.
- Coastway services between Ashford (Kent), Brighton and Southampton, and local Coastway services
- Services between Brighton/Wimbledon and Bedford/Luton via London Blackfriars
- Services between London King's Cross/Moorgate and Peterborough and King's Lynn.

Thameslink, Southern and Great Northern

On 26 July 2015, the Thameslink, Southern and Great Northern franchises began operation as Govia Thameslink Railway (GTR).

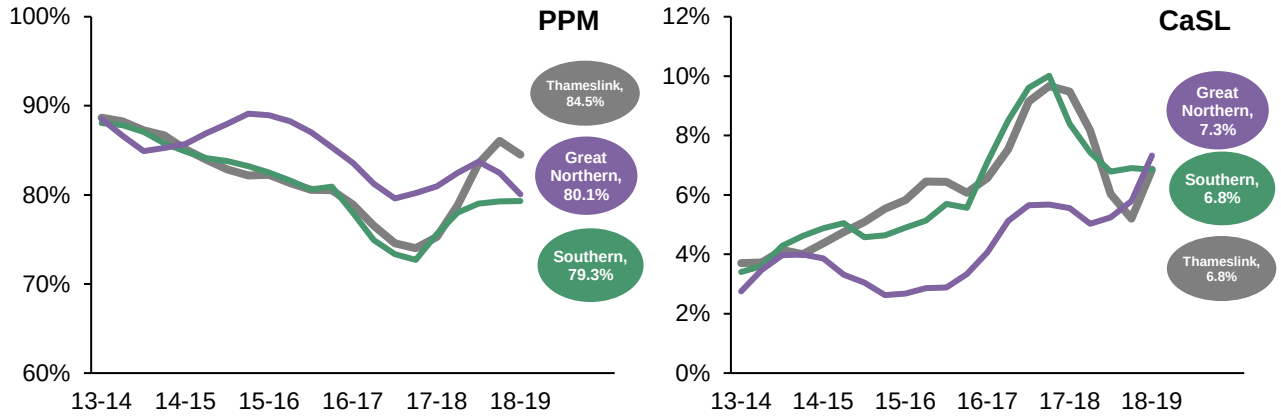
At the end of Q1 of 2018-19, the MAAs for punctuality (PPM) for the sub operators were:

- Southern: 79.3% (up 3.7 pp on Q1 2017-18).
- Thameslink: 84.5% (up 9.2 pp on Q1 2017-18).
- Great Northern: 80.1% (down 0.9 pp on Q1 2017-18).

At the end of Q1 of 2018-19, the MAAs for reliability (CaSL) for the sub operators were:

- Southern: 6.8% (down 1.6 pp on Q1 2017-18).
- Thameslink: 6.8% (down 2.6 pp on Q1 2017-18).
- Great Northern: 7.3% (up 1.8 pp on Q1 2017-18).

Figure 3.09: PPM and CaSL MAA, Southern, Thameslink, and Great Northern, 2013-14 Q1 to 2018-19 Q1



Route Information - Southern

- Services between London Victoria/London Bridge and South London and Sussex.
- Coastway services between Brighton and Lewes, Seaford, Ore and Ashford (Kent).
- Coastway services between Brighton and Hove, Worthing, Portsmouth, Southampton, and between Littlehampton and Bognor Regis and Portsmouth.

Route Information - Thameslink

- Services between Brighton/Wimbledon and Bedford/Luton via London Blackfriars.

Route Information – Great Northern

- Services between London King's Cross/Moorgate and Peterborough and King's Lynn.

Grand Central

Punctuality (PPM) in Q1 was 76.3%. This has worsened by 11.7 pp compared with Q1 in 2017-18. The MAA stands at 80.9%, which has worsened by 4.4 pp compared with the Q1 2017-18 MAA, and is the lowest Q1 PPM MAA since the time series began in 2009-10.

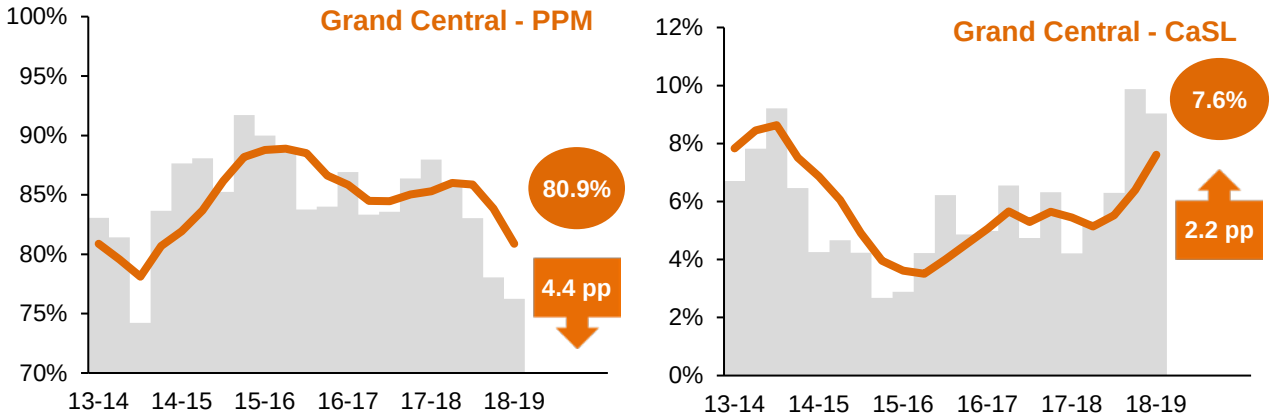
Reliability (CaSL) in Q1 was 9.0%. This has worsened by 4.8 pp compared with Q1 in 2017-18. The MAA stands at 7.6%, which has worsened by 2.2 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to Network Rail increased by 77% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to External causes (up from 29 to 66 failures), and Points and Signals failures (up from 36 to 65 failures).

CaSL failures attributed to Grand Central increased by 133% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase from 22 to 59 failures in CaSL failures attributed to Fleet delays.

A Power fault between Alexandra Palace and Finsbury Park caused 6,400 delay minutes to all operators in Q1 2018-19.

Figure 3.10: PPM and CaSL, Grand Central, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Long Distance)

- Services between London King's Cross and Sunderland and Bradford.

Great Western Railway

Punctuality (PPM) in Q1 was 82.0%. This has worsened by 6.5 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since the time series began in 2004-05. The MAA stands at 84.2%, which has worsened by 3.9 pp compared with the Q1 2017-18 MAA.

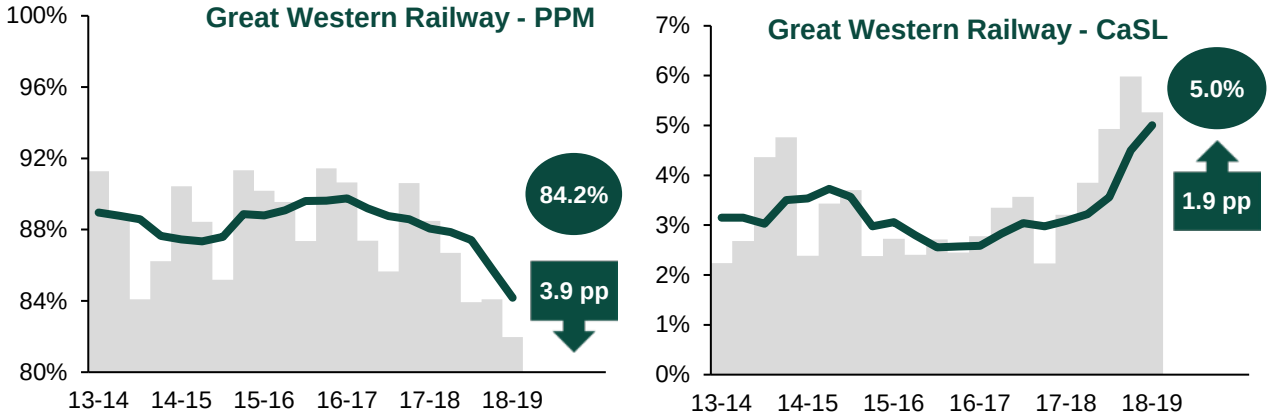
Reliability (CaSL) in Q1 was 5.3%. This has worsened by 2.1 pp compared with Q1 in 2017-18. The MAA stands at 5.0%, which has worsened by 1.9 pp compared with the Q1 2017-18 MAA, and is the highest (worst) CaSL MAA for any quarter since the time series began in 2004-05.

PPM failures attributed to GWR increased by 84% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Fleet delays (up 64%), and Train Crew causes (up 182%).

PPM failures attributed to Network Rail increased by 44% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increase in PPM failures attributed to Network Rail's management of the network (up 54%), and Points and Signals failures (up 51%).

Adverse Weather at London Paddington caused 6,500 delay minutes to all operators, and a Power Supply failure at Swindon caused 6,400 delay minutes to all operators.

Figure 3.11: PPM and CaSL, Great Western Railway, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Regional)

- Services between Bristol and Cardiff.
- Services between Gloucester and Swindon and Weymouth.
- Services between Portsmouth and Cardiff.
- Services in Devon and Cornwall

Route Information (LSE)

- Services between London Paddington and Reading and Oxford.
- Branch lines to Greenford, Windsor, Marlow, and Henley
- Services between Reading and Basingstoke, and Gatwick Airport.

Route Information (Long Distance)

- Services between London Paddington and Westbury, Taunton, Exeter, Paignton, Plymouth, and Penzance.
- Services between London Paddington and Swindon, Bristol, Cardiff, Swansea, and Carmarthen.
- Services between London Paddington and Worcester, Hereford, and Cheltenham.

Greater Anglia

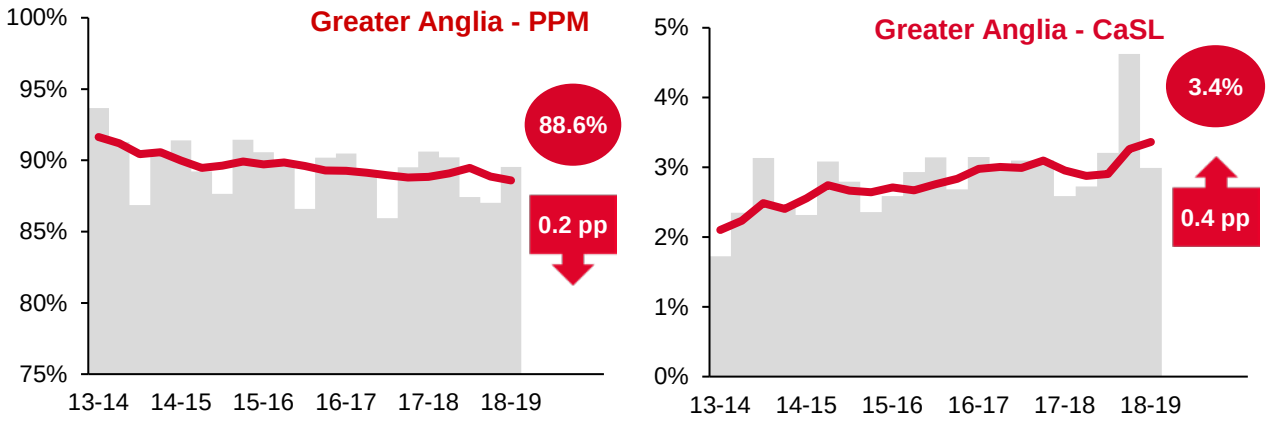
Punctuality (PPM) in Q1 was 89.5%. This has worsened by 1.1 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2006-07. The MAA stands at 88.6%, which has worsened by 0.2 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 3.0%. This has worsened by 0.4 pp compared with Q1 in 2017-18. The MAA stands at 3.4%, which has worsened by 0.4 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL MAA since the time series began in 2005-06.

PPM failures attributed to Greater Anglia increased by 41% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 58% in PPM failures attributed to Fleet delays.

Emergency Speed restrictions between March and Ely North Junction caused 9,900 delay minutes to all operators in Q1 2018-19.

Figure 3.12: PPM and CaSL, Greater Anglia, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- Services between London Liverpool Street and East London, Stansted Airport, Cambridgeshire, Essex, and Ipswich.
- Local services in Norfolk and Suffolk
- Services between Norwich and Ipswich, and Lowestoft, Cambridge, and Peterborough.

Route Information (Long Distance)

- Services between London Liverpool Street and Norwich

Heathrow Express

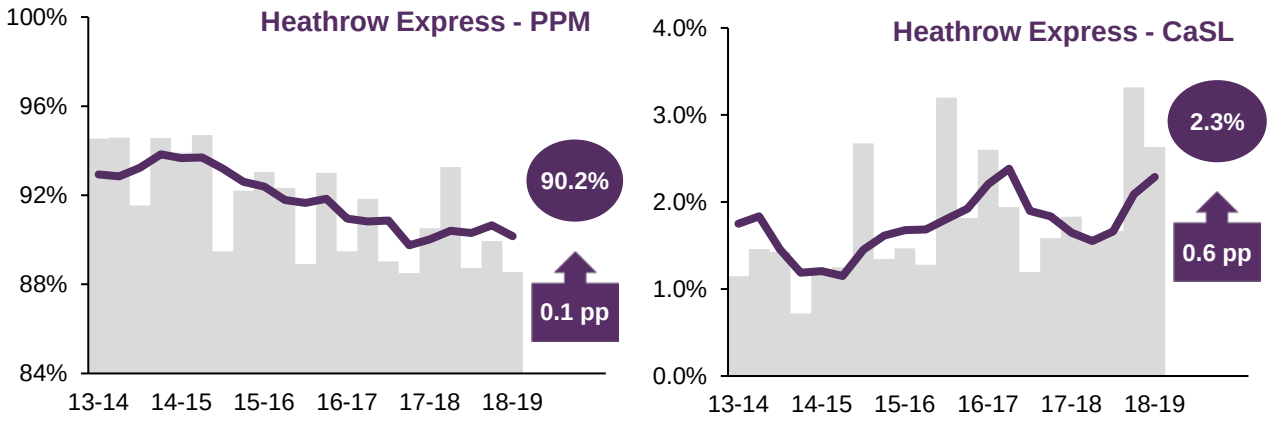
Punctuality (PPM) in Q1 was 88.6%. This has worsened by 2.0 pp compared with Q1 in 2017-18. The MAA stands at 90.2%, which has improved by 0.1 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 2.6%. This has worsened by 0.8 pp compared with Q1 in 2017-18. The MAA stands at 2.3%, which has worsened by 0.6 pp compared with the Q1 2017-18 MAA, and is the second highest (worst) CaSL MAA for any quarter since the time series began in 2005-06 (after Q2 2016-17).

PPM failures attributed to Network Rail increased by 60% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 149% in PPM failures attributed to Points and Signals failures.

However, PPM failures attributed to Heathrow Express decreased by 49% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to a decrease of 47% in PPM failures attributed to Fleet delays.

Figure 3.13: PPM and CaSL, Heathrow Express, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- Services between London Paddington and Heathrow Airport.

Hull Trains

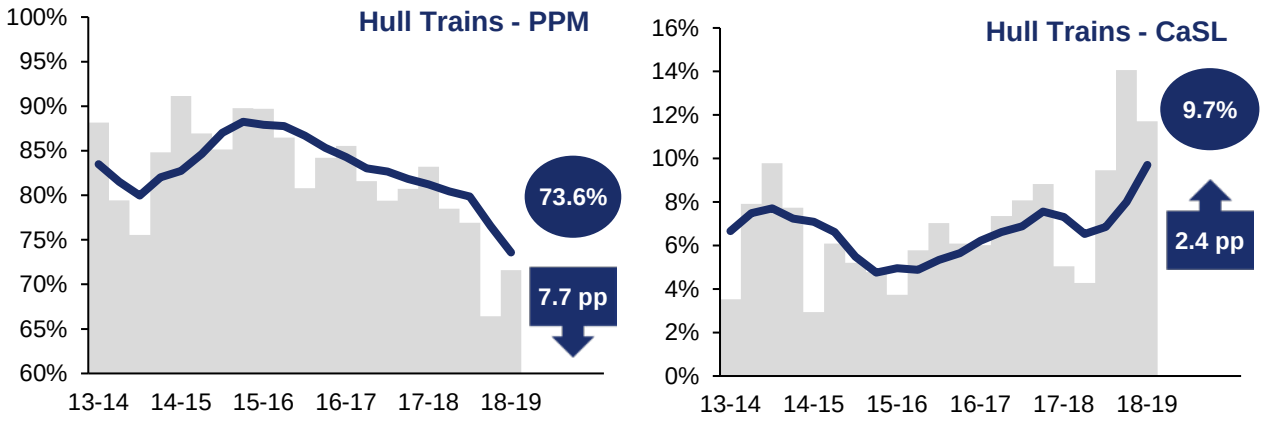
Punctuality (PPM) in Q1 was 71.6%. This has worsened by 11.6 pp compared with Q1 in 2017-18. The MAA stands at 73.6%, which has worsened by 7.7 pp compared with the Q1 2017-18 MAA, and is the lowest PPM MAA for any quarter since the time series began in 2007-08.

Reliability (CaSL) in Q1 was 11.7%. This has worsened by 6.7 pp compared with Q1 in 2017-18. The MAA stands at 9.7%, which has worsened by 2.4 pp compared with the Q1 2017-18 MAA, and is the highest (worst) Q1 CaSL MAA since the time series began in 2007-08.

PPM failures attributed to Hull Trains increased by 214% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of from 22 to 91 failures in PPM failures attributed to Fleet delays.

A Power fault between Alexandra Palace and Finsbury Park caused 6,400 delay minutes to all operators in Q1 2018-19.

Figure 3.14: PPM and CaSL, Hull Trains, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Long Distance)

- Services between London King's Cross and Selby, Hull, and Beverley.

London North Eastern Railway

Virgin Trains East Coast became London North Eastern Railway in June of Q1 in 2018-19.

Punctuality (PPM) in Q1 was 75.3%. This has worsened by 12.0 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2002-03. The MAA stands at 78.5%, which has worsened by 5.2 pp compared with the Q1 2017-18 MAA.

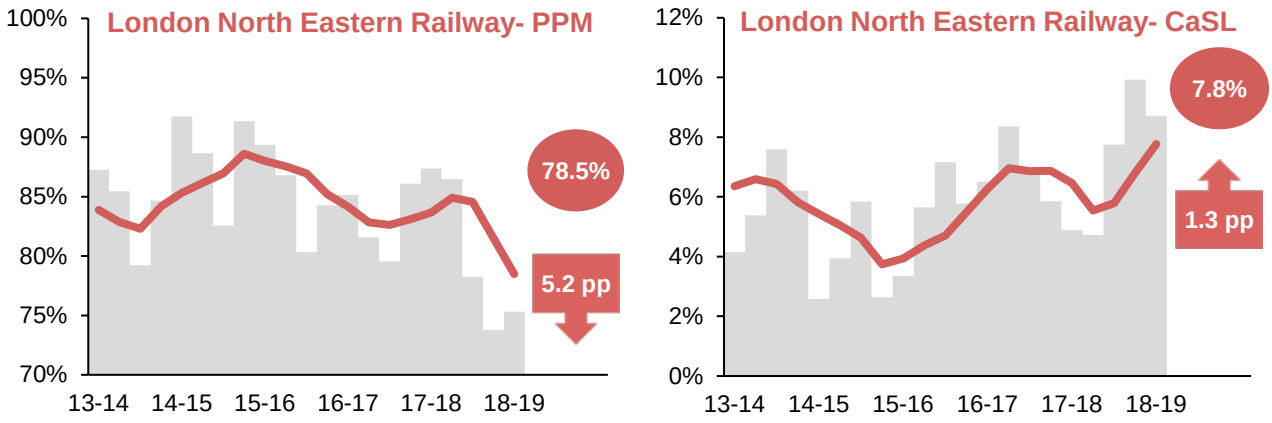
Reliability (CaSL) in Q1 was 8.7%. This has worsened by 3.8 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since 2001-02. The MAA stands at 7.8%, which has worsened by 1.3 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to Network Rail increased by 88% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to External causes (up 118%), and Points and Signals failures (up 45%).

PPM failures attributed to London North Eastern Railway increased by 104% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 111% in PPM failures attributed to Fleet delays.

A Power fault between Alexandra Palace and Finsbury Park caused 6,400 delay minutes to all operators in Q1 2018-19.

Figure 3.23: PPM and CaSL, Virgin Trains East Coast, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Long Distance)

- Services between London King's Cross and Newark, Lincoln, Hull, Doncaster, Leeds, Bradford, Harrogate, York, Newcastle, Sunderland, Edinburgh, Glasgow, Stirling, Inverness, and Aberdeen.

London Overground

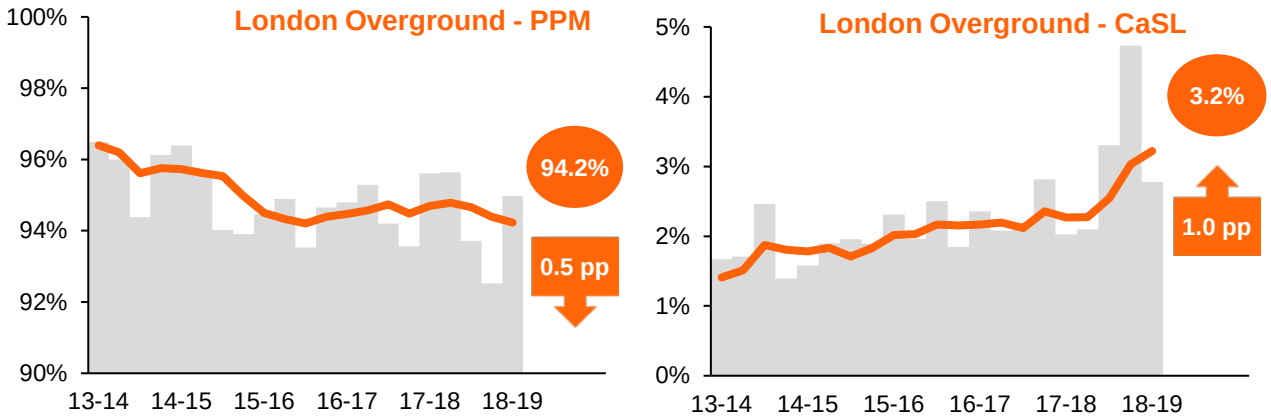
Punctuality (PPM) in Q1 was 95.0%. This has worsened by 0.6 pp compared with Q1 in 2017-18. The MAA stands at 94.2%, which has worsened by 0.5 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 2.8%. This has worsened by 0.8 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since 2007-08. The MAA stands at 3.2%, which has worsened by 1.0 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to London Overground increased by 52% in Q1 of 2018-19 compared with Q1 of 2017-18. This was mainly due to an increase of 67% in PPM failures attributed to Fleet delays.

CaSL failures attributed to London Overground increased by 86% in Q1 of 2018-19 compared with Q1 of 2017-18. This was mainly due to an increase of 90% in CaSL failures attributed to Fleet delays.

Figure 3.15: PPM and CaSL, London Overground, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- Services between London Euston and Watford Junction
- Services between London Liverpool Street and Cheshunt and Chingford.
- Services between Highbury and Islington and West Croydon/Crystal Palace, between Dalston Junction and New Cross/Clapham Junction, between Stratford and Clapham Junction/Richmond, and between Romford and Upminster.

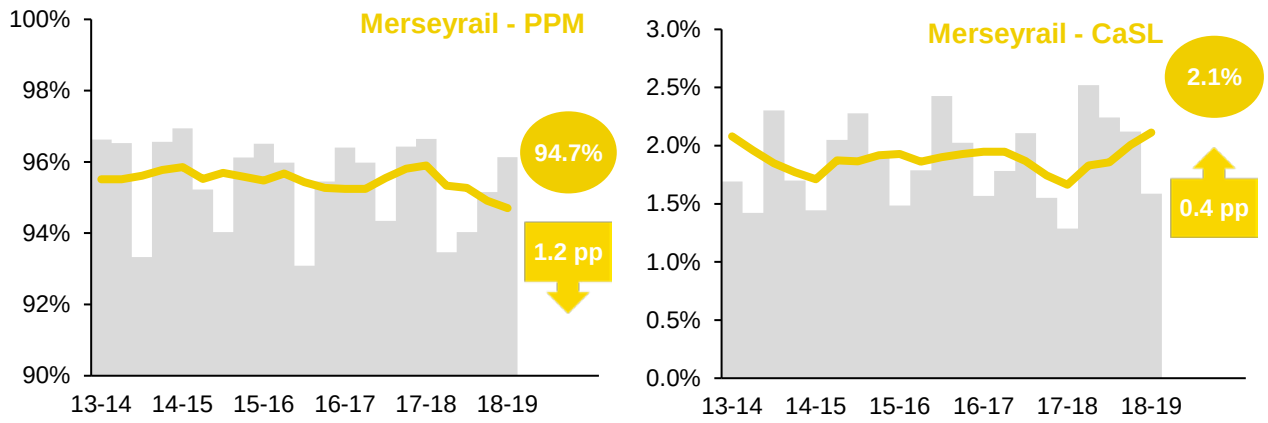
Merseyrail

Punctuality (PPM) in Q1 was 96.1%. This has worsened by 0.5 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2007-08. The MAA stands at 94.7%, which has worsened by 1.2 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 1.6%. This has worsened by 0.3 pp compared with Q1 in 2017-18. The MAA stands at 2.1%, which has worsened by 0.4 compared with the Q1 2017-18 MAA.

PPM failures attributed to Merseyrail increased by 14% in Q1 of 2018-19 compared with Q1 of 2017-18. This was mainly due to an increase of 40% in PPM failures attributed to Train Crew causes.

Figure 3.16: PPM and CaSL, Merseyrail, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Regional)

- Services between Liverpool and Birkenhead, New Brighton, West Kirby, Chester, Ellesmere Port, Southport, Ormskirk, Kirkby, and Hunts Cross.

Northern

Punctuality (PPM) in Q1 was 81.0%. This has worsened by 10.5 pp compared with Q1 in 2017-18, and is the lowest PPM for any quarter since the time series began in 2009-10. The MAA stands at 85.6%, which has worsened by 5.2 pp compared with the Q1 2017-18 MAA, and is the lowest PPM MAA for any quarter since the time series began in 2009-10.

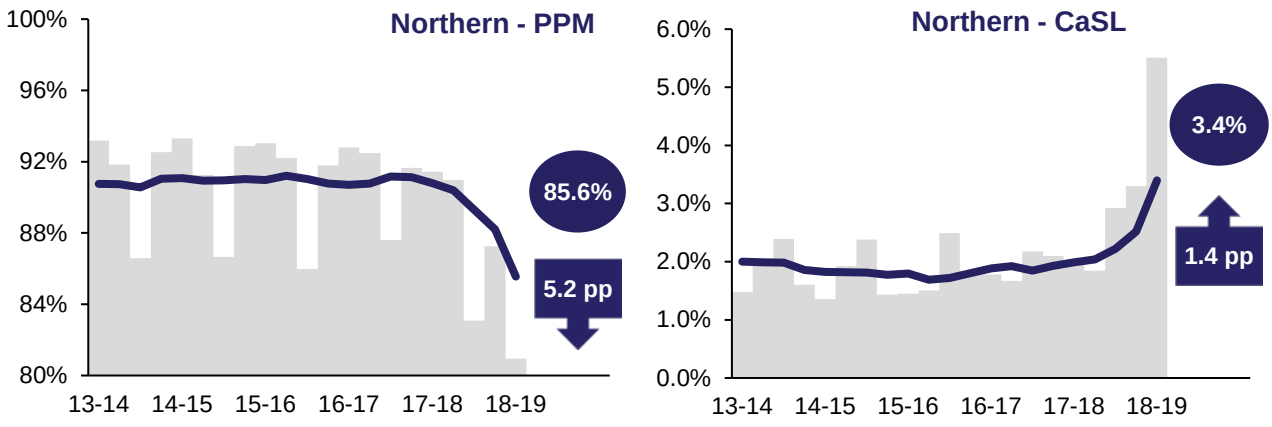
Reliability (CaSL) in Q1 was 5.5%. This has worsened by 3.5 pp compared with Q1 in 2017-18. The MAA stands at 3.4%, which has worsened by 1.4 pp compared with the Q1 2017-18 MAA, and is the highest (worst) CaSL MAA for any quarter since the time series began in 2009-10.

PPM failures attributed to Northern increased by 212% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Fleet delays (up 81%), Train Crew causes (up 377%), and TOC Operations (up from 414 to 7,735 failures). This increase occurred around the time of the timetable change in May 2018.

PPM failures attributed to Network Rail increased by 60% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 111%), and Points and Signals failures (up 43%).

There were a number of incidents in Q1 2018-19 which caused considerable delay including: Points failures at Slade Lane Junction (8,000 delay minutes to all operators); and Train Operations faults at Manchester Victoria (12,900 delay minutes to all operators).

Figure 3.17: PPM and CaSL, Northern, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Regional)

- Local services in and around the cities of Leeds, Liverpool, Manchester, Newcastle-upon-Tyne, and Sheffield
- Local services in counties such as Cheshire, Cumbria, Lancashire, Durham, Northumberland, and Yorkshire.

ScotRail

Punctuality (PPM) in Q1 was 90.3%. This has worsened by 2.2 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2005-06. The MAA stands at 88.9%, which has worsened by 1.6 pp compared with the Q1 2017-18 MAA.

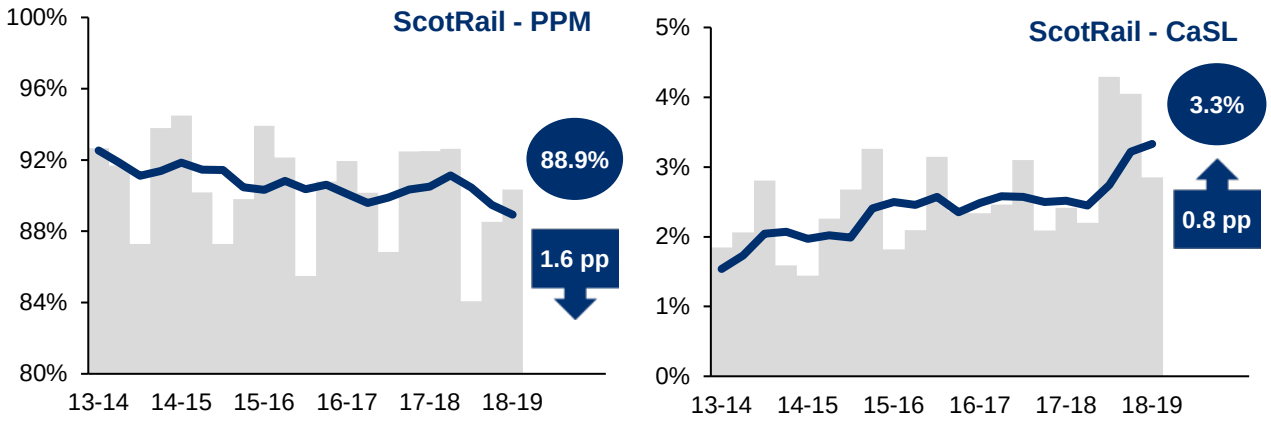
Reliability (CaSL) in Q1 was 2.9%. This has worsened by 0.4 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since the time series began in 1997-98. The MAA stands at 3.3%, which has worsened by 0.8 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to Network Rail increased by 51% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 56%), and Severe weather (up 357%).

CaSL failures attributed to Network Rail increased by 34% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 347% in CaSL failures attributed to Severe weather.

Adverse weather causing emergency speed restrictions affecting Glasgow and Edinburgh caused 11,900 delay minutes to all operators in Q1 2018-19.

Figure 3.18: PPM and CaSL, ScotRail, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Scotland)

- Local services in and around Edinburgh and Glasgow.
- Services between Glasgow and Oban, Fort William, and Mallaig.
- Services between Glasgow and Ayr, Stranraer, Dumfries, Carlisle, and Newcastle.
- Services between Glasgow and Edinburgh, and Stirling, Perth, Dundee, Aberdeen, and Inverness.
- Services between Inverness and Thurso/Wick and Kyle of Lochalsh.

South Western Railway

Punctuality (PPM) in Q1 was 87.6%. This has worsened by 1.5 pp compared with Q1 in 2017-18. The MAA stands at 83.9%, which has worsened by 3.1 pp compared with the Q1 2017-18 MAA, and is the lowest PPM MAA for any quarter since Q4 in 2004-05.

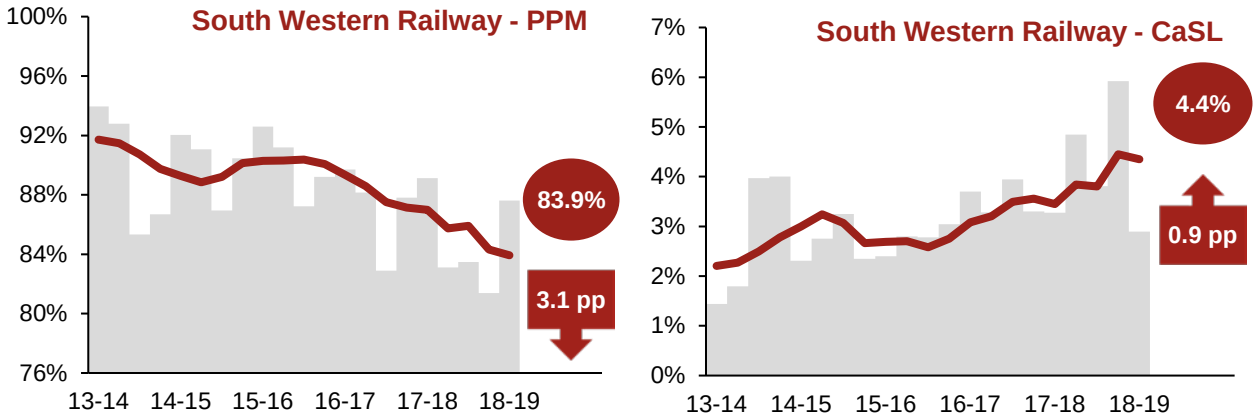
Reliability (CaSL) in Q1 was 2.9%. This has worsened by 0.4 pp compared with Q1 in 2017-18. The MAA stands at 4.4%, which has worsened by 0.9 pp compared with the Q1 2017-18 MAA, and is the highest (worst) Q1 CaSL MAA since 2001-02.

PPM failures attributed to Network Rail increased by 13% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Track causes (up 38%), and Network Rail's management of the network (up 19%).

CaSL failures attributed to South Western Railway increased by 22% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 87% in CaSL failures attributed to Fleet delays.

There were a number of incidents in Q1 2018-19 which caused considerable delay including: Technical Fleet delays at Clapham Junction and Surbiton (22,300 delay minutes to all operators), and Points failures at Woking (8,000 delay minutes to all operators).

Figure 3.19: PPM and CaSL, South Western Railway, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- Services between London Waterloo and South West London, Surrey, Portsmouth, Southampton, Poole, and Weymouth.
- Services between London Waterloo and Basingstoke, Salisbury, Reading, Windsor, Exeter and Bristol.
- Services on the Isle of Wight and services between Brockenhurst and Lymington.

Southeastern

Punctuality (PPM) in Q1 was 88.3%. This has worsened by 4.1 pp compared with Q1 in 2017-18, and the second lowest Q1 PPM since 2004-05 (after 2016-17). The MAA stands at 87.7%, which has improved by 0.6 pp compared with the Q1 2017-18 MAA.

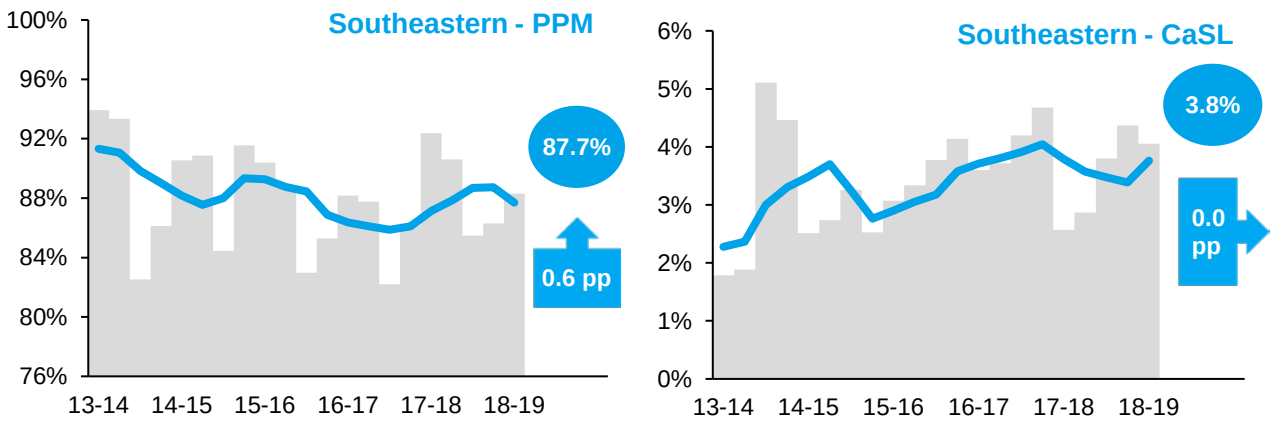
Reliability (CaSL) in Q1 was 4.1%. This has worsened by 1.5 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since the time series began in 1997-98. The MAA stands at 3.8%, which is the same as the Q1 2017-18 MAA.

PPM failures attributed to Network Rail increased by 62% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 69%), and Points and Signals failures (up 82%).

CaSL failures attributed to Network Rail increased by 92% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in CaSL failures attributed to Points and Signals failures (up 104%), and Severe Weather (up 287%).

There were a number of incidents in Q1 2018-19 which caused considerable delay including: External fatalities/trespass between North Kent East Junction and Lewisham (14,700 delay minutes to all operators); Severe weather between Woolwich Arsenal and Charlton (8,600 delay minutes to all operators); and Overhead line equipment faults between Lewisham and North Kent East Junction (8,300 delay minutes to all operators).

Figure 3.20: PPM and CaSL, Southeastern, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- High Speed Services between London St Pancras and Gillingham (Kent), Canterbury, Ramsgate, Ashford (Kent), and Dover.
- Services between London Charing Cross/Victoria/Cannon Street and South East London, Kent, and Hastings.
- Services between Strood and Maidstone and Tonbridge, between Sittingbourne and Sheerness, and between Bromley and Grove Park.

TfL Rail

On 20 May 2018 TfL Rail took over some local GWR services out of London Paddington, which significantly increased the number of trains run by TfL Rail. The historic data have been remapped to the new services for this statistical release, and are not comparable with the data in previous statistical releases.

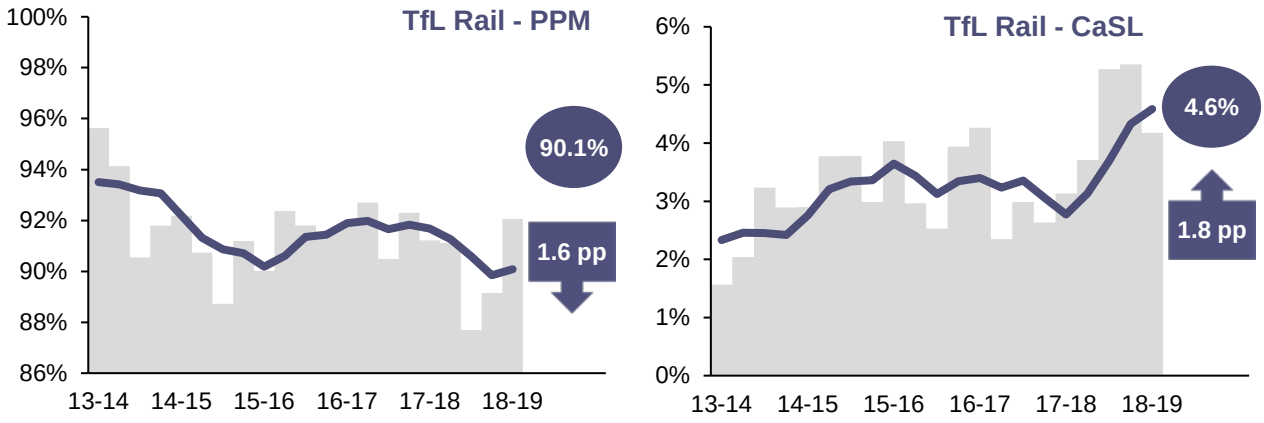
Punctuality (PPM) in Q1 was 92.1%. This has improved by 0.8 pp compared with Q1 in 2017-18. The MAA stands at 90.1%, which has worsened by 1.6 pp compared with the Q1 2017-18 MAA, and is the lowest Q1 PPM MAA since the time series began in 2010-11.

Reliability (CaSL) in Q1 was 4.2%. This has worsened by 1.0 pp compared with Q1 in 2017-18. The MAA stands at 4.6%, which has worsened by 1.8 pp compared with the Q1 2017-18 MAA, and is the highest (worst) CaSL MAA for any quarter since the time series began in 2010-11.

PPM failures attributed to TfL Rail increased by 192% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 204% in PPM failures attributed to Fleet delays.

Adverse Weather at London Paddington caused 6,500 delay minutes to all operators in Q1 2018-19.

Figure 3.21: PPM and CaSL, TfL Rail, 2013-14 Q1 to 2018-19 Q1
(change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (LSE)

- Services between London Liverpool Street and Shenfield.
- Services between London Paddington and Heathrow Airport.

TransPennine Express

Punctuality (PPM) in Q1 was 76.6%. This has worsened by 13.8 pp compared with Q1 in 2017-18, and is the lowest PPM for any quarter since the time series began in 2009-10. The MAA stands at 82.7%, which has worsened by 6.1 pp compared with Q1 in 2017-18.

Reliability (CaSL) in Q1 was 11.3%. This has worsened by 7.0 pp compared with Q1 in 2017-18, and is the highest (worst) CaSL for any quarter since the time series began in 2009-10. The MAA stands at 7.8%, which has worsened by 3.0 pp compared with the Q1 2017-18 MAA.

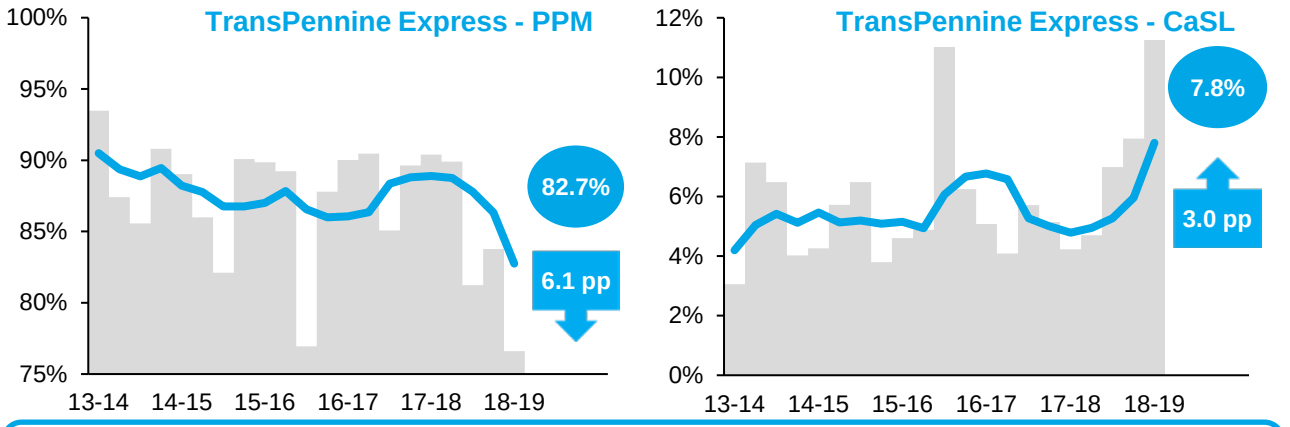
PPM failures attributed to Network Rail increased by 136% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 355%), and Points and Signals failures causes (up 106%).

PPM failures attributed to TransPennine Express increased by 140% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 252% in PPM failures attributed to Train Crew causes.

PPM failures attributed to other TOCs increased by 317% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase from 18 to 573 failures in PPM failures attributed to TOC operations. These increases occurred around the time of the timetable change in May 2018.

Train Operations faults at Manchester Victoria caused 12,900 delay minutes to all operators in Q1 2018-19.

Figure 3.22: PPM and CaSL, TransPennine Express, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Long Distance)

- Services between Liverpool and Newcastle-upon-Tyne and Scarborough.
- Services between Manchester Airport and York, Middlesbrough, Hull, and Cleethorpes.
- Services between Manchester Airport and Edinburgh and Glasgow.

Virgin Trains West Coast

Punctuality (PPM) in Q1 was 85.0%. This has worsened by 4.0 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2009-10. The MAA stands at 83.2%, which has worsened by 5.7 pp compared with the Q1 2017-18 MAA.

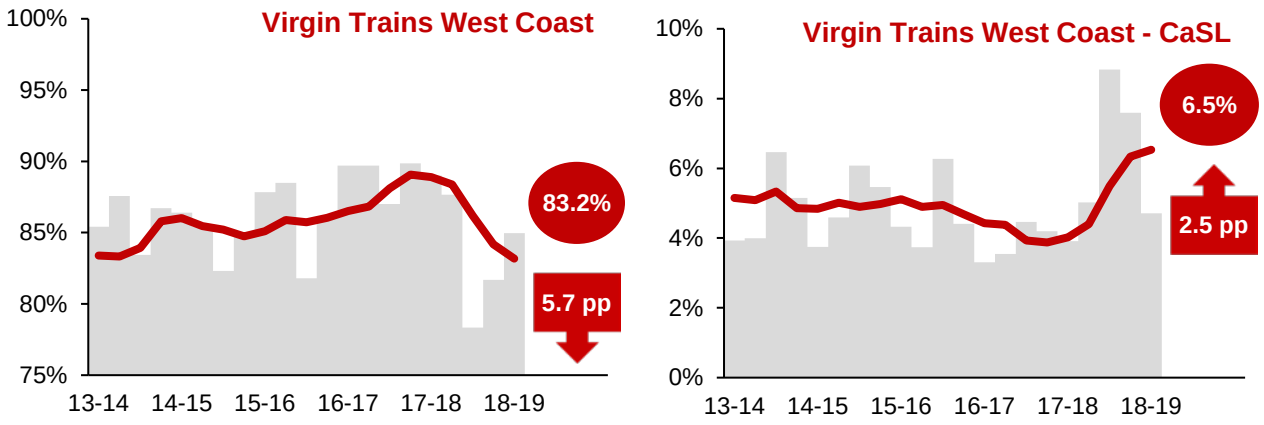
Reliability (CaSL) in Q1 was 4.7%. This has worsened by 0.8 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since 2009-10. The MAA stands at 6.5%, which has worsened by 2.5 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to Network Rail increased by 37% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 135%), and External causes (up 45%).

PPM failures attributed to Other TOCs increased by 99% in Q1 of 2018-19 compared with Q1 in 2017-18. This was mainly due to an increase of 69% in PPM failures attributed to Fleet delays.

There were a number of incidents in Q1 2018-19 which caused considerable delay including: Track faults between Hanslope Junction and Weedon (10,400 delay minutes to all operators); and Points failures at Slade Lane Junction (8,000 delay minutes to all operators).

Figure 3.24: PPM and CaSL, Virgin Trains West Coast, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Long Distance)

- Services between London Euston and Birmingham, Wrexham, Chester, Holyhead, Liverpool, Manchester, Blackpool, Edinburgh, and Glasgow.

West Midlands Trains

Punctuality (PPM) in Q1 was 87.9%. This has worsened by 3.0 pp compared with Q1 in 2017-18, and is the lowest Q1 PPM since 2005-06. The MAA stands at 86.8%, which has worsened by 2.2 pp compared with the Q1 2017-18 MAA.

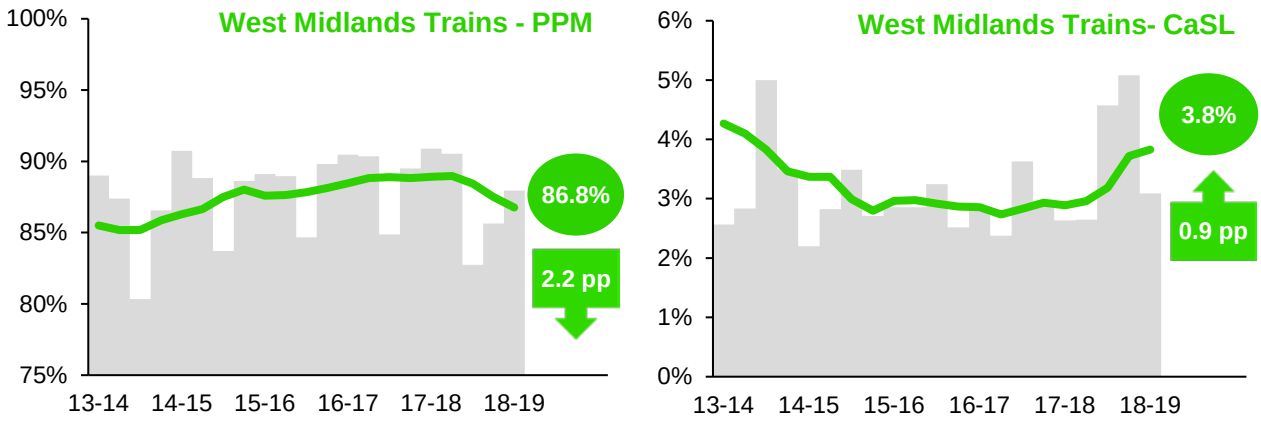
Reliability (CaSL) in Q1 was 3.1%. This has worsened by 0.5 pp compared with Q1 in 2017-18, and is the highest (worst) Q1 CaSL since 2008-09. The MAA stands at 3.8%, which has worsened by 0.9 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to Network Rail increased by 37% in Q1 of 2018-19 compared with Q1 of 2017-18. This was mainly due to an increase of 65% in PPM failures attributed to Networks Rail's management of the network.

PPM failures attributed to West Midlands Trains increased by 25% in Q1 of 2018-19 compared with Q1 of 2017-18. This was mainly due to increases in PPM failures attributed to Fleet delays (up 21%), and Other TOC causes (up 56%).

There were a number of incidents in Q1 2018-19 which caused considerable delay including: Track faults between Hanslope Junction and Weedon (10,400 delay minutes to all operators); and External fires between Willesden Junction and Harrow & Wealdstone (6,400 delay minutes to all operators).

Figure 3.25: PPM and CaSL, London Midland, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Regional)

- Services between Birmingham and Liverpool, Shrewsbury, Hereford, Rugeley, and Walsall.
- Local services in the West Midlands.

Route Information (LSE)

- Services between London Euston and Watford, Milton Keynes, Northampton, Birmingham, Staffordshire, and Crewe.
- Services between Watford and St Albans, Bletchley, and Bedford.

Caledonian Sleeper

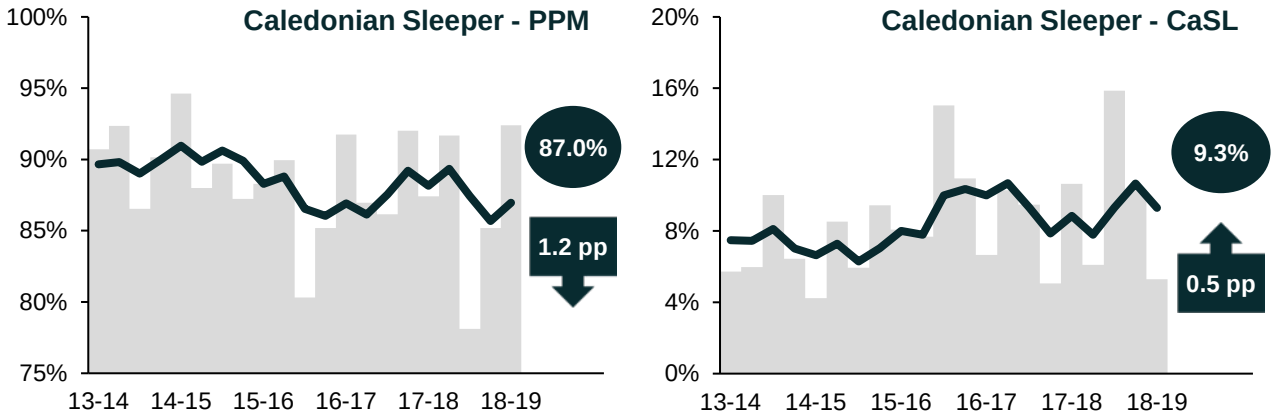
Punctuality (PPM) in Q1 was 92.4%. This has improved by 5.0 pp compared with Q1 in 2017-18. The MAA stands at 87.0%, which has worsened by 1.2 pp compared with the Q1 2017-18 MAA.

Reliability (CaSL) in Q1 was 5.3%. This has improved by 5.3 pp compared with Q1 in 2017-18. The MAA stands at 9.3%, which has worsened by 0.5 pp compared with the Q1 2017-18 MAA.

PPM failures attributed to Network Rail decreased by 41% (from 27 to 16 PPM failures) in Q1 in 2018-19 compared with Q1 in 2017-18. This was mainly due to a decrease in PPM failures attributed to External causes (down from 9 to 2 failures).

CaSL failures attributed to Caledonian Sleeper decreased by 42% (from 29 to 17 PPM failures) in Q1 in 2018-19 compared with Q1 in 2017-18. This was mainly due to a decrease in CaSL failures attributed to Fleet delays (down from 21 to 9 failures).

Figure 3.26: PPM and CaSL, Caledonian Sleeper, 2013-14 Q1 to 2018-19 Q1 (change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Route Information (Long Distance)

- Services between London Euston and Watford, Crewe, Preston, Edinburgh, Glasgow, Fort William, Aberdeen, and Inverness.

4. Freight Delivery Metric

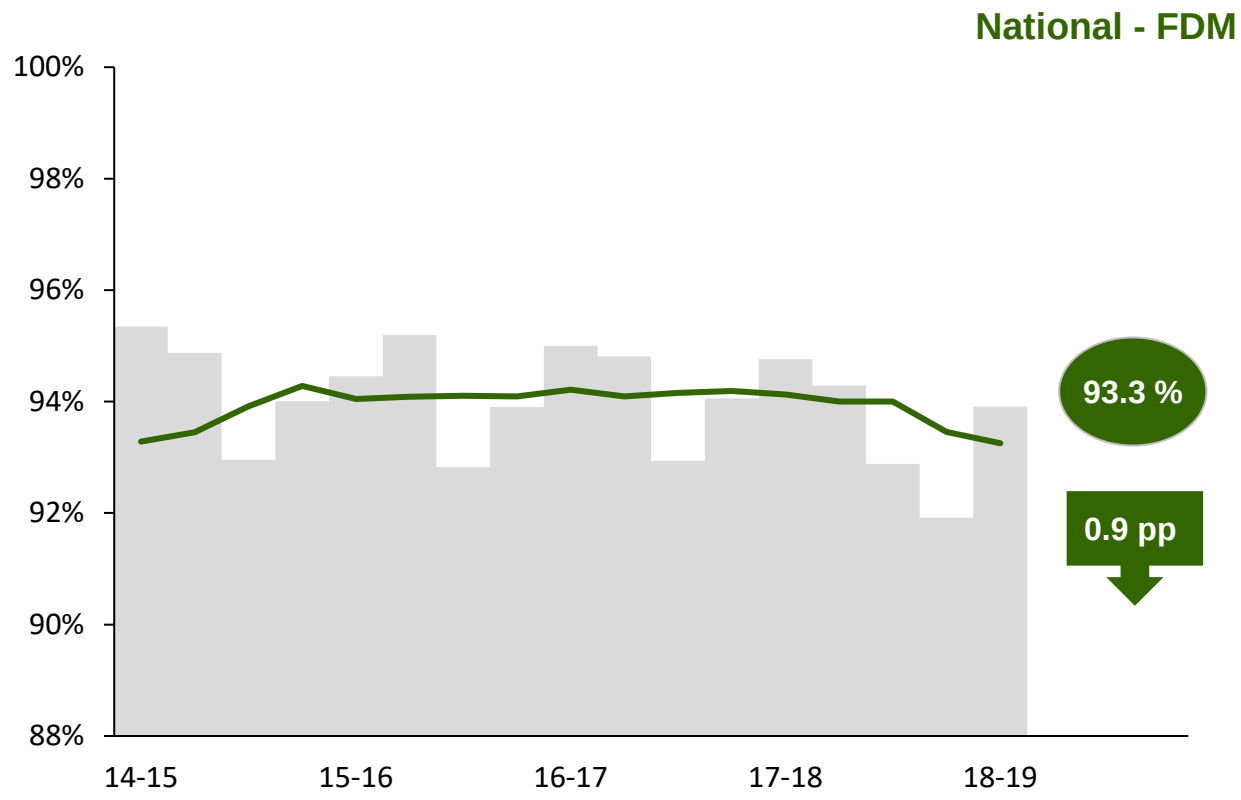
The **Freight Delivery Metric (FDM)** is the percentage of freight trains that arrive at their destination within 15 minutes of their scheduled arrival time. Freight trains are only considered to have failed FDM where the delay was caused by Network Rail. The **moving annual average (MAA)** reflects the proportion of trains that met FDM in the past 12 months. In Q4, the MAA also represents the FDM for the financial year.

A higher score indicates higher performance.

FDM was introduced for CP5 (Control Period 5: 2014-15 – 2018-19), although it has been recorded since the end of the 2012-13. It replaced the **Freight Performance Measure (FPM)** which previously was used to provide an indication of the punctuality of freight journeys.

FDM in Q1 was 93.9%. This has worsened by 0.9 pp compared with Q1 in 2017-18. The MAA stands at 93.3%, which has also worsened by 0.9 pp compared with the Q1 2017-18 MAA.

Figure 4.01: FDM, National, 2013-14 Q1 to 2018-19 Q1
(change shown is MAA for 2018-19 Q1 on 2017-18 Q1)



Annex 1 – List of pre-created reports available on the Data Portal

All data tables can be accessed on the Data Portal free of charge. The data portal provides on screen data reports, as well as the facility to download data in Excel format and print the report. We can provide data in csv format on request.

PPM

- PPM by sector, 1997-98 to 2017-18 (annual) and 1997-98 Q1 to 2018-19 Q1 (quarterly) – Table 3.43;
- PPM (MAA) by sector, 1997-98 Q4 to 2018-19 Q1 (quarterly) – Table 3.42;
- PPM by TOC, 1997-98 Q1 to 2018-19 Q1 (quarterly) – Table 3.44
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2018-19 Period 4 (periodic) – Data Portal (Table 3.9 (All TOCs) to Table 3.29 (Caledonian Sleeper))

CaSL

- CaSL by sector, 1997-98 to 2017-18 (annual) and 1997-98 Q1 to 2018-19 Q1 (quarterly) – Table 3.6;
- CaSL (MAA) by sector, 1997-98 Q4 to 2018-19 Q1 (quarterly) – Table 3.5
- CaSL by TOC, 1997-98 Q1 to 2018-19 Q1 (quarterly) – Table 3.7
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2018-19 Period 4 (periodic) – Data Portal (Table 3.9 (All TOCs) to Table 3.29 (Caledonian Sleeper))

FDM

- FDM, 2013-14 Q1 to 2018-19 Q1 (quarterly) – Table 3.41

Right Time

Right Time performance measures the percentage of trains that arrived at their final destination within one minute of the scheduled arrival time. Unlike PPM, the threshold for Right Time performance is the same for all operators. ORR publishes periodic Right Time data on Table 3.9 of the Data Portal by TOC and sub-operator[1]. The national Right Time score for 2017-18 was 63.0%. This compares with a national PPM score of 87.8%.

Delay Minutes

We currently publish limited Network Rail caused delay minute data on Table 3.46 of the Data Portal. Network Rail attributed delays are also available in Network Rail's Annual Return on the Network Rail website. This reports Network Rail achievements, developments, and challenges for each financial year and the historical record of Network Rail stewardship.

Revisions

There have been no revisions to the previously published dataset. Further details on historic revisions to the data set can be found on the Revisions Log.

[1] Right Time data for individual TOCs and sub-operators can be accessed via the passenger and freight rail performance page.

Annex 2 – Data Collection, Quality and Targets

Most of the data contained within this release are collected automatically from Network Rail's TRUST System[2]. The latest data for PPM, CaSL and FDM should be treated as provisional, as train operators provide Network Rail with details of cancellations which can be updated over time. These updates are only provided at the TOC level. As such, aggregations of sub-operator data can provide slightly different figures to those published at the operator level.

Network Rail provides data within 21 days of the end of each of the 13 railway reporting periods. The production of the quarterly results discussed in this report requires the periodic data to be split according to the number of days of the period that falls within each quarter. For example, the dates in period 4 cover both Q1 and Q2. When the quarterly data are calculated for 2018-19, 7/28 of the data are assigned to Q1 (covering 24 June to 30 June) and 21/28 of the data are assigned to Q2 (covering 1 July to 21 July).

Further details on railway reporting periods, data collection, the methodology used to calculate the data within this release, and details of which services are included in each sector, please see the accompanying passenger and freight rail performance quality report.

Where possible, Network Rail remaps historical data to match the railway franchises that exist today. Nevertheless, the number of passenger trains planned increased by 29%[3] between 1997-98 and 2017-18. In the same time, the length of route open for passenger traffic has not increased by a significant amount[4]. So the density of trains running on the network is higher now than at the end of the last century. Therefore, the potential for disruption to spread around network has increased, while the ability for services to be recovered has been diminished. Furthermore, twice as many passenger journeys were made in 2017-18 than in 1997-98[5]. This may have increased station dwell times and harmed performance as it takes longer to get passengers on and off trains during peak hours.

[2] Train Running System on TOPs (Total Operation Processing System)

[3] ORR Website – Historic PPM and CaSL

[4] The length of route open to passenger traffic has increased by less than 1% since 2007-08 (Data Portal - Table 2.52: Infrastructure on the railways)

[5] Data Portal - Table 12.5: Passenger journeys by year

Changes to Sector Composition

Some services in North West England transferred from the Long Distance sector to the Regional sector at the start of 2016-17. As a consequence, they now have a five-minute threshold for PPM, having previously been timed to ten minutes. To avoid different versions of PPM scores, the historic data for these sectors and the overall national score have not been adjusted to reflect these changes. The year-on-year changes described in this report have also been calculated using the unadjusted historical data. Nevertheless, using disaggregated data it is possible to assess what the effect of these changes would have been on PPM and PPM MAA in 2015-16:

- **National**: Almost no affect with PPM falling marginally from 89.05% to 89.03%.
- **Long Distance**: PPM reduced from 87.64% to 87.35%.
- **Regional and Scotland**: Almost no affect with PPM falling marginally from 91.21% to 91.17%.

Targets

As a regulator we assess Network Rail's success, through regulatory targets, on whether it achieves the outputs, as set out in the determination, and does so whilst meeting all its license and statutory obligations. Network Rail has regulatory targets for PPM, CaSL and FDM. Further information regarding the performance targets can be accessed on the Network Rail website.

The ORR publicly reports on Network Rail's outputs with respect to the regulated targets via the bi-annual Network Rail Monitor. The time frame of quarterly data in this statistical release differs from the time frame of the railway period data in the Monitor, and therefore figures may differ slightly. The next Monitor covering periods 1 to 7 of 2018-19 is due to be published in December 2018.

Annex 3 – PPM and CaSL by Train Operating Company (TOC)

The data provided in Table 3.44 (PPM by TOC) and Table 3.7 (CaSL by TOC) show the railway as it exists today. That is, historical data are shown for the existing TOCs as far back as data are available. For some TOCs data are available as far back as 1997-98. While comparisons can be made with historical data, it should be noted that the service provided by many operators has changed substantially.

As an example, Virgin Trains West Coast (VTWC) planned to run 55,600 trains in 1997-98. By 2012-13 this figure had almost doubled to reach 110,400. In December 2013, however, VTWC reconfigured their timetable to extend Scotland to Birmingham services to London in place of some Birmingham to London services. A change in service composition such as this would have had an effect on the overall level of performance of the TOC.

A time-series for trains planned, PPM and CaSL is available on the ORR Website that shows the performance of the TOCs that existed at the time.

Cross-Sector Train Operating Companies

Four operators provide services in more than one sector: East Midlands Trains, Great Western Railway, Greater Anglia and West Midlands Trains. Performance for the whole of these operators can be viewed in in Table 3.44 (PPM by TOC) and Table 3.7 (CaSL by TOC).

Data for the sectoral components of the TOCs can be accessed via the disaggregated tables: Table 3.15 (East Midlands Trains), Table 3.17 (Great Western Railway), Table 3.20 (Greater Anglia) and Table 3.21 (West Midlands Trains). The sectoral components for each operator are comprised of the following sub-operator groups:

East Midlands Trains:

- Long Distance: Long Distance (including Liverpool – Norwich)
- Regional: Regional

Great Western Railway:

- London and South East: London and Thames Valley
- Long Distance: High Speed
- Regional: Regional

Greater Anglia:

- London and South East: GE Outer, Rural, Southend and metro, Stansted Express, and WA Outer excluding Stansted Express
- Long Distance: Intercity

West Midlands Trains:

- London and South East: LSE
- Regional: Regional

Changes to Train Operating Companies

TfL Rail took over the Paddington to Hayes & Harlington and Heathrow Airport routes from Great Western Railway on 20 May 2018 in preparation for the linking up of Crossrail. This means that from 20 May TfL Rail operated more trains and Great Western Railway operated fewer.

London North Eastern Railway began operating the East Coast franchise on 24 June 2018. It was previously operated by Stagecoach and Virgin, and was previously referred to in this publication as Virgin Trains East Coast. London North Eastern Railway is owned by the Department for Transport (DfT) and is operated by the DfT's operator of last resort, a consortium of Arup Group, Ernst & Young, and SNC-Lavalin Rail & Transit

Abellio began operating the West Midlands franchise on 10 December 2017, now known as West Midlands Trains. It was previously operated by Govia, and the franchise was previously referred to in this publication as London Midland.

FirstGroup began operating the South Western franchise on 20 August 2017, now known as South Western Railway. It was previously operated by Stagecoach, and the franchise was previously referred to in this publication as South West Trains.

Timetable change 20 May 2018

Twice every year, in May and December, a new system-wide timetable is produced for the railway network. In May 2018 on some routes and for some operators this change caused disruption, in particular for Govia Thameslink Railway, Northern, and TransPennine Express. This timetable change occurred halfway through Q1 (which covers April, May, June), and so will have had an impact on the PPM and CaSL figures for this quarter.

There is currently an ongoing Inquiry by the ORR into the disruption caused by the timetable change. The Interim report was published on 20 September 2018.

Annex 4 – Statistical Releases

This publication is part of the statistical releases which cover the majority of reports that were previously released through the Data Portal. The statistical releases consist of four annual and four quarterly themed releases:

Annual

- Rail Finance & Rail Fares Index;
- Rail Safety Statistics;
- Rail Infrastructure, Assets and Environmental;
- Regional Rail Usage.

Quarterly

- Passenger and Freight Rail Performance;
- Freight Rail Usage;
- Passenger Rail Usage;
- Passenger Rail Service Complaints.

A full list of publication dates for the next twelve months can be found in the release schedule on the ORR website.

National Statistics

The United Kingdom Statistics Authority designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is ORR's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

For more details please contact the Statistics Head of Profession Lyndsey Melbourne on 020 7282 3978 or contact rail.stats@orr.gsi.gov.uk.

The Department for Transport (DfT) also publishes a range of rail statistics which can be found at DfT Rail Statistics.

This publication is available at orr.gov.uk

Any enquiries regarding this publication should be sent to us at orr.gov.uk