



Passenger and Freight Rail Performance 2016-17 Q3 Statistical Release

Publication date: 16 February 2017

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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 October, November and December 2016.

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)**.

Additionally, [delay minute data](#) (quarterly) and [Right Time data](#) (periodic) are published on the [Data Portal](#).

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

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National PPM in 2016-17 Q3 was 84.3%. This was 1.1 percentage points (pp) worse than the same quarter last year. The moving annual average (**MAA**) was down 1.6 pp compared with the previous year and ended Q3 at 87.7%.

At 85.4%, the **PPM MAA** for the **London and South East sector** ended Q3 lower than that of the Long Distance sector. Govia Thameslink Railway services accounted for 1.8 pp of the overall 2.7 pp fall in the London and South East MAA.

PPM MAA by Sector - 2016-17 Q3

National (GB)	87.7%	↓	-1.6 pp
Regional and Scotland	91.1%	↓	-0.2 pp
London and South East	85.4%	↓	-2.7 pp
Long Distance	87.4%	↓	-0.4 pp

Compared with 2015-16 Q3

National CaSL in 2016-17 Q3 was 4.4%, up 0.8 pp compared with 2015-16 Q3. The **MAA** worsened by 0.7 pp during the last year to end Q3 at 3.8%.

CaSL MAA by Sector - 2016-17 Q3

National (GB)	3.8%	↑	0.7 pp
Regional and Scotland	2.3%	↑	0.1 pp
London and South East	4.6%	↑	1.2 pp
Long Distance	4.8%	↑	0.3 pp

Compared with 2015-16 Q3

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1. Introduction

This release contains information on passenger and freight rail performance in Great Britain since 1997-98. The latest data in this release refer to Q3 of 2016-17 (1st October to 31st December 2016). The data covered within the release are:

Public Performance Measure (PPM): This is the percentage of trains that arrived at their final destination within five minutes of their scheduled arrival time (within ten minutes for Long Distance services). A higher score is better.

PPM moving annual average (PPM MAA): This is the percentage of trains that met PPM in the last 12 months.

Cancellations and Significant Lateness (CaSL): This is the percentage of trains that have been cancelled (in part or in full) and/or arrived at their final destination late by more than 30 minutes. Trains that fail CaSL also fail PPM. A lower score is better.

CaSL moving annual average (CaSL MAA): This is the percentage of trains that failed CaSL in the last 12 months.

Freight Delivery Metric (FDM): This is the percentage of freight trains that arrived 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. A higher score is better.

FDM moving annual average (FDM MAA): This is the percentage of trains that met FDM in the last 12 months.

PPM and CaSL are judged against what is known as the plan of the day. This is confirmed by the operator and Network Rail at 22:00 on the previous evening. Trains removed from the railway systems before this time are excluded from the PPM and CaSL calculations.

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%¹ between 1997-98 and 2015-16. In the same time, the length of route open for passenger traffic has not increased by a significant amount². So the density of trains running on the network is higher now than at the end of the last century. Furthermore, twice as many passenger journeys were made in 2015-16 than in 1997-98³. This may have affected station dwell times. Therefore, the potential for disruption to spread around network has increased, while the ability for services to be recovered has been diminished.

¹ [ORR Website – Historic PPM and CaSL](#)

² 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](#))

³ [Data Portal - Table 12.5: Passenger journeys by year](#)

Data Quality

Most of the data contained within this release are collected automatically from Network Rail's TRUST System⁴. 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 7 cover both Q2 and Q3. When the quarterly data are calculated for 2016-17, 13/28 of the data are assigned to Q2 (covering 18 September to 30 September) and 25/28 of the data are assigned to Q3 (covering 1 October to 15 October).

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](#).

Right Time and Delay Minutes

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 the [Data Portal](#) by TOC and sub-operator. The national Right Time score for 2015-16 was 64.4%. This was compared with a national PPM score of 89.1%.

We currently publish limited Network Rail caused delay minute data on the [Data Portal](#). 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](#).

⁴ Train Running System on TOPs (Total Operation Processing System)

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 licence 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 8 to 13 of 2016-17 is due to be published in June/July 2017.

2. Public Performance Measure (PPM)



Public Performance Measure (PPM) 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 the Long Distance operators. The **moving annual average (MAA)** reflects the proportion of trains on time in the past 12 months. A higher score is better.

PPM by sector

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%.

2016-17 Quarter 3 PPM Results

National PPM in 2016-17 Q3 was 84.3%. Down 1.1 pp compared with 2015-16 Q3, this is the worst Q3 score recorded since 2005-06 (81.7%). The London and South East (LSE) sector recorded a PPM score of 81.8% in Q3. This was down 2.7 pp compared with the same quarter the previous year and is the lowest Q3 score recorded since 2003-04 (76.7%).

In Q3 of 2016-17, Govia Thameslink Railway (GTR) operated 15% of all services in Great Britain. PPM failures by GTR services, however, were responsible for 86%⁵ of the decline in national PPM in Q3. That is, GTR services that failed PPM accounted for 0.9 pp of the overall 1.1 pp fall in the quarterly national PPM for Q3. For the LSE sector, GTR accounted for 65% (1.8 pp) of the 2.7 pp fall in the quarterly PPM for Q3.

Services in the Regional and Scotland sector recorded a PPM of 88.0% in Q3 of 2016-17. This was up 0.8 pp compared with same quarter the previous year. The Long Distance sector recorded a PPM of 84.2% in Q3. Up 1.0 pp compared with 2015-16 Q3, this is the best Q3 score recorded since 2011-12 (86.7%).

All delay minutes 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. Delays caused by issues with trains or traincrew are attributed to train operators. In 2016-17 Q3, 60.4% of delays to passenger trains were attributed to Network Rail with external factors accounting for just over 16% of the overall total. Further information on the causes of delay can be found on the [Data Portal](#).

The decline in performance in the LSE sector can be attributed to a number of causes. Delays relating to cable faults (3,300 PPM failures) increased by more than 200% and delays due to issues with traincrew (25,400 PPM failures) were up 34% compared with 2015-16 Q3. There was also an increase in uninvestigated delays⁶. These accounted for 19,200 PPM failures⁷ in 2016-17 Q3 which was up more than 200% compared with the same quarter the previous year.

- Annual and quarterly PPM by sector data are available on the Data Portal in [Table 3.43](#)

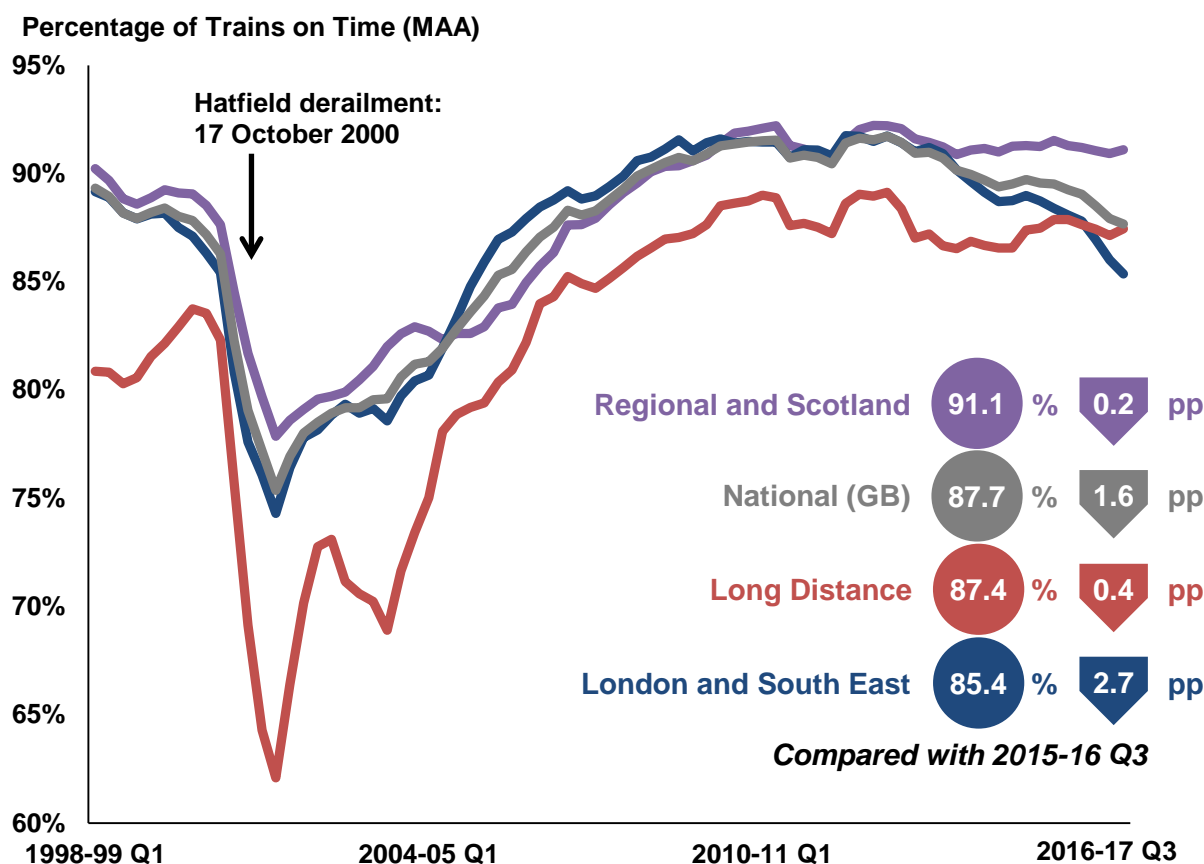
⁵ For more information on estimating this figure, please see the [methodology annex](#).

⁶ The delay attribution process can become overwhelmed at the times of severe disruption leading to some delays being uninvestigated.

⁷ 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.

2016-17 Quarter 3 PPM MAA Results

PPM MAA by sector, Great Britain, 1998-99 Q1 to 2016-17 Q3 ([Table 3.42](#))



While the overall performance is still better than that recorded in the early 2000s, the national PPM MAA has declined steadily since the start of 2013-14. The national MAA of 87.7% is the lowest it has been since Q2 of 2006-07 (87.5%). Notwithstanding the extra five minutes afforded to Long Distance services for meeting PPM, this sector has historically had the lowest PPM scores. However, the Long Distance sector ended Q3 with a PPM MAA of 87.4% and continues to have a higher MAA than the LSE sector (85.4%).

In the 12 months to the end of 2016-17 Q3, GTR operated 15% of all services. PPM failures by GTR services, however, were responsible for 64%⁸ of the year-on-year decline in the national PPM MAA. That is, GTR services that failed PPM were responsible for 1.0 pp of the overall 1.6 pp fall in the national PPM MAA. For the LSE sector, GTR accounted for 67% (1.8 pp) of the 2.7 pp year-on-year fall in the PPM MAA for Q3.

■ Quarterly PPM MAA by sector data are available on the Data Portal in [Table 3.42](#)

⁸ For more information on estimating this figure, please see the [methodology annex](#).

PPM 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.

Changes to Train Operating Companies

On 26 July 2015, Southern became part of Govia Thameslink Railway (GTR) and they are treated as a single TOC in this report. Disaggregated PPM and CaSL data for the sub-operators within GTR are, however, still published on the [Data Portal](#). Prior to the merger GTR consisted of the Great Northern and Thameslink, while Southern was made up of Southern Mainline and Coast, Southern Metro and Gatwick Express.

The new Northern and TransPennine Express (TPE) franchises commenced operation on 1 April 2016. Having previously been operated by Serco-Abellio, the former is now operated by Arriva. The TPE franchise is now solely operated by FirstGroup having previously been run as a joint venture between FirstGroup and Keolis.

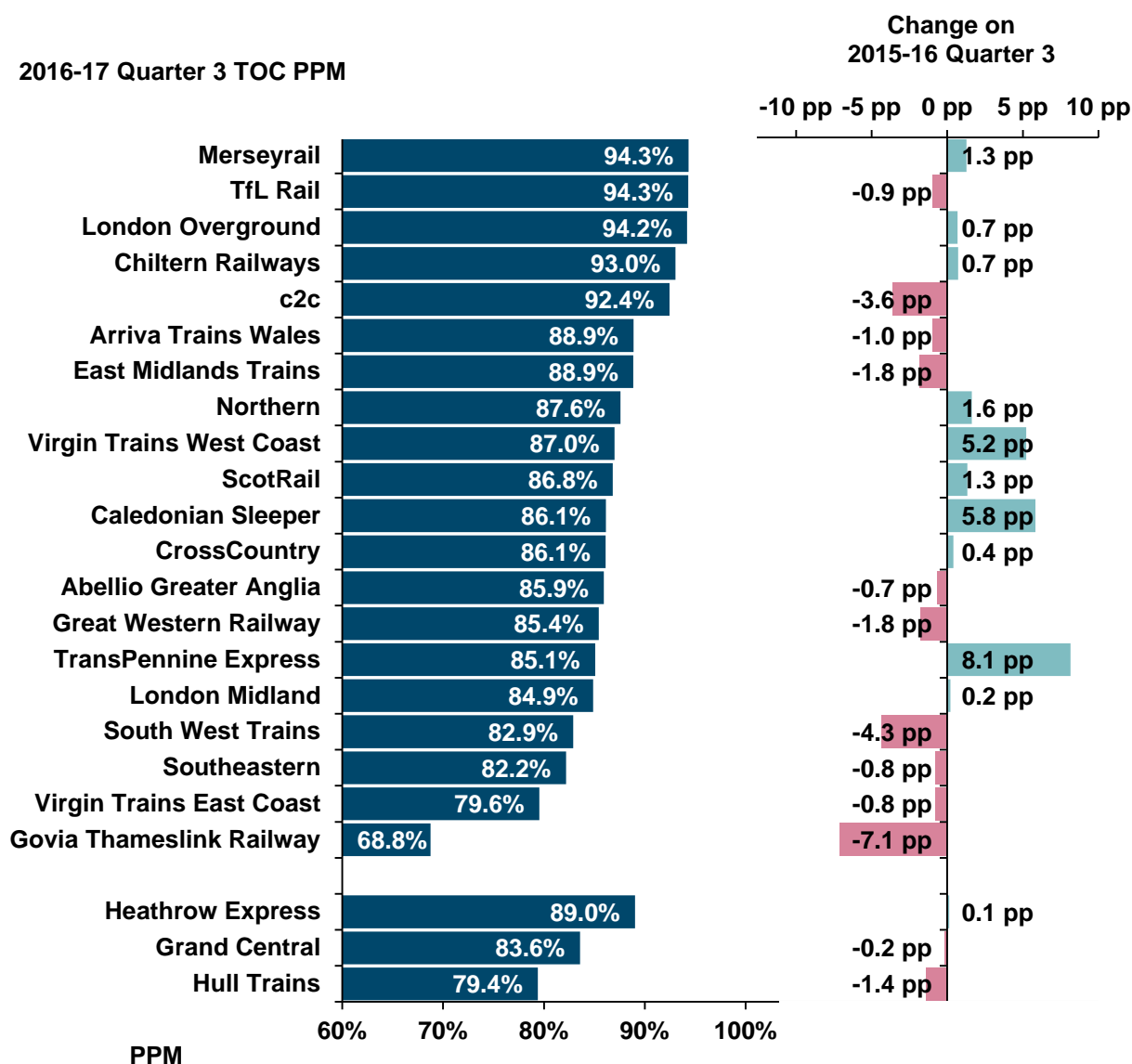
Furthermore, services between Manchester Airport and Blackpool North/Barrow-in-Furness and between Oxenholme and Windermere were transferred from TPE to Northern. As described [previously in this report](#), this has affected the historical PPM scores at the national and sector level. The historic data for Northern and TPE have been remapped to allow like for like comparisons to be made for these TOCs.

On 13 November 2016, operation of the London Overground concession passed from London Overground Rail Operations Limited⁹ to Arriva Rail London. The composition of the services is unaffected and the operator will be continued to be referred to as London Overground.

⁹ LOROL was a joint venture between Arriva UK Trains and MTR Corporation.

2016-17 Quarter 3 PPM Results by TOC

PPM by TOC, Great Britain, 2015-16 Q3 and 2016-17 Q3 ([Table 3.44](#))



Up 1.3 pp compared with Q3 of 2015-16, Merseyrail had the highest proportion of trains on time this quarter at 94.3%. This was Merseyrail's best Q3 since 2009-10 (95.5%). Down 0.9 pp compared with the previous year, TfL Rail also recorded a PPM score of 94.3% in Q3 of 2016-17.

Five of the 20 franchised train operators had a PPM of more than 90% in 2016-17 Q3. GTR, with a PPM of 68.8%, had the lowest score, which was the lowest Q3 PPM recorded by GTR since the time series began in 2004-05.

GTR has recorded the worst PPM score in the last nine quarters. Some of this sustained poor performance can be attributed to the on-going engineering works at London Bridge.

Performance was also adversely affected by ongoing staffing issues at GTR¹⁰ and a number of other incidents including a signal failure between Purley and East Croydon and fatalities at East Croydon and Norwood Junction.

Half of the 20 franchised train operators had a higher percentage of trains on time when compared with the same quarter the previous year. TPE recorded a PPM of 85.1% in Q3 which was an increase of 8.1 pp compared with Q3 the previous year. TPE benefitted from more benign weather in 2016-17 Q3, but there was also a reduction in the number PPM failures attributed to track faults (down 64%) and traincrew problems (down 78%). Caledonian Sleeper (up 5.8 pp) and VTWC (up 5.2 pp) also benefitted from more benign weather in Q3 of 2016-17.

Aside from the substantial fall in Q3 PPM at GTR (down 7.1 pp), South West Trains (SWT) recorded a fall of 4.3 pp compared with 2015-16 Q3. The 82.9% was the TOC's lowest Q3 PPM score since 2004-05 (78.3%). This was driven by a 60% increase in PPM failures associated with signalling systems¹¹, a number of broken rails between Surbiton and London Waterloo and a 15% increase in PPM failures caused by technical faults associated with the fleet of trains operated by SWT. Uninvestigated PPM failures also increased by more than 300% compared with the previous year.

Another TOC to have a relatively poor Q3 was c2c which recorded a PPM of 92.4%. This was their lowest Q3 score since 2010-11 (90.5%) and was partly due to an increase in track faults on the route. There has, however, also been an increase in the number of technical faults with the fleet of trains operated by c2c. Around 365 c2c PPM failures were attributed to such causes in Q3. This represents an increase of 278% on the 97 that were recorded in Q3 of 2015-16.

Peak services:

Train services arriving into London termini between 07:00 and 09:59 in the morning and departing London termini between 16:00 and 18:59 in the evening are classified as peak services. For the LSE sector as a whole, peak PPM in 2016-17 Q3 was 74.5%. This was down 2.4 pp compared with 2015-16 Q3 and the lowest Q3 score since the time series began. Up 3.6 pp compared with the previous year, London Overground recorded the highest peak PPM in the quarter at 92.2%.

¹⁰ While the industrial action has affected performance, the PPM and CaSL statistics mask the full impact of the dispute. This is because GTR have implemented a revised timetable on strike days. Trains excluded from the plan of the day before 22:00 on the previous day are not included in the PPM and CaSL calculations.

¹¹ This includes signal failures, signalling system and power supply failures, track circuit failures, axle counter failures and other signal equipment failures.

GTR had the lowest peak PPM in Q3 at 61.3% which was down 4.9 pp compared with the previous year. Down 5.4 pp on Q3 last year, SWT's 74.8% was their worst Q3 peak PPM score since 2004-05 (72.4%). Similarly, c2c (90.9%) experienced a fall of 4.1 pp compared with the previous year giving them their worst Q3 score since 2010-11 (89.8%).

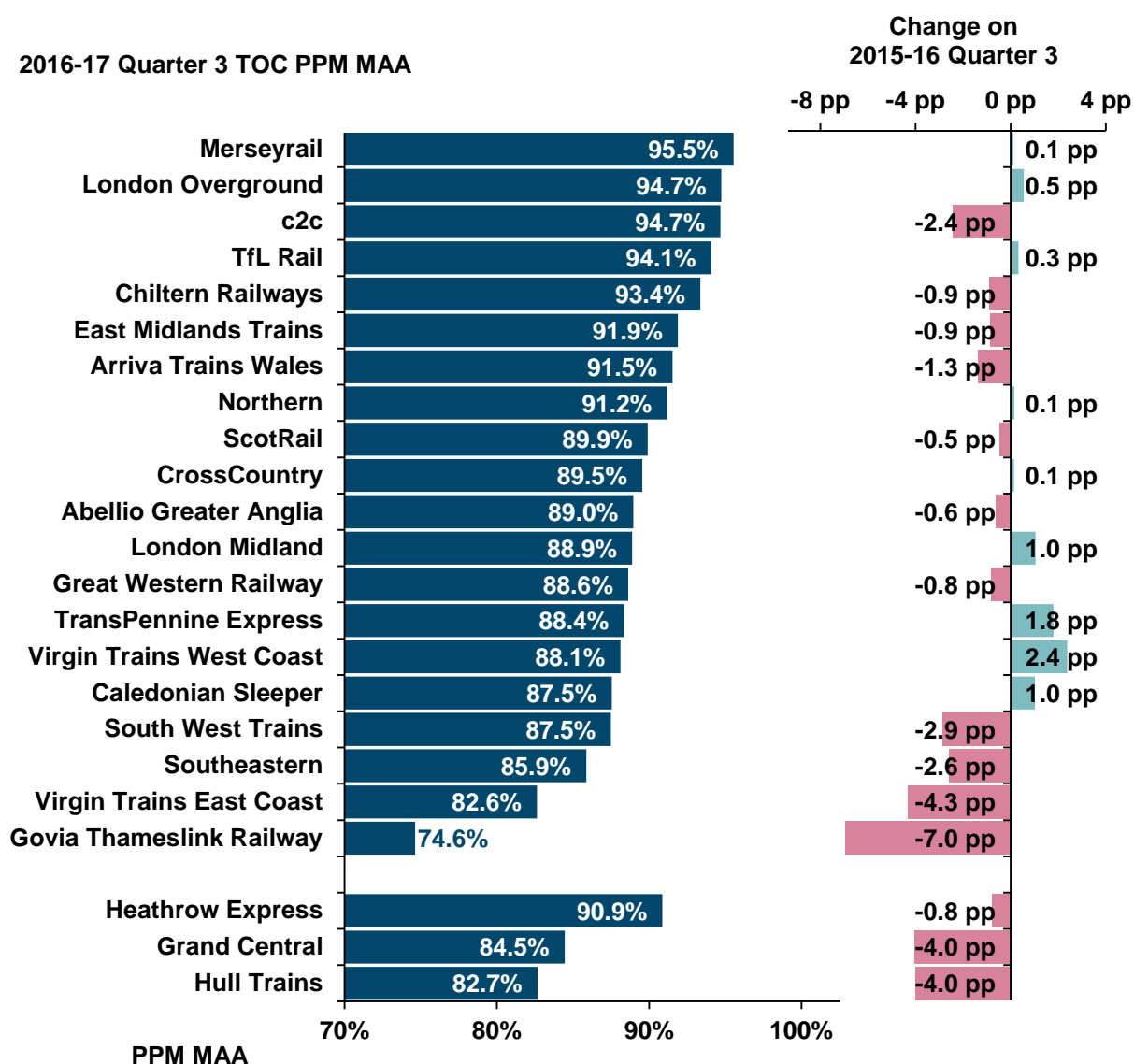
Non-franchised operators:

With 89.0% of trains on time in Q3, Heathrow Express marginally improved on its score from the previous year (88.9%). Grand Central and Hull Trains operate long distance services on the East Coast Main Line. Grand Central's PPM score of 83.6% in Q3 was down 0.2 pp compared with the previous year while Hull Trains scored 79.4% which was a fall of 1.4 pp.

- Quarterly PPM by TOC data are available on the Data Portal in [Table 3.44](#)

2016-17 Quarter 3 PPM MAA Results by TOC

PPM MAA by TOC, Great Britain, 2015-16 Q3 and 2016-17 Q3 ([Table 3.44](#))



For the first time since Q2 of 2011-12, c2c did not record the highest PPM MAA. They ended Q3 of 2016-17 with an MAA of 94.7% which is the lowest it has been since Q1 of 2008-09 (94.5%). Their place at the top was taken by Merseyrail who ended the quarter with an MAA of 95.5%.

VTWC (up 2.4 pp) and TPE (up 1.8 pp) experienced the largest year-on-year MAA increases to end 2016-17 Q3 at 88.1% and 88.4% respectively. Also benefitting from improved performance on the West Coast Main Line, both London Midland and Caledonian Sleeper recorded 1.0 pp year-on-year increases to their MAAs.

At 74.6%, GTR had the lowest MAA at the end of Q3. Down 7.0 pp compared with the previous year, this was the lowest MAA recorded by GTR since the time series began in 2004-05. VTEC (82.6%) recorded the second lowest MAA in Q3 which is 4.3 pp lower than at the same time the previous year.

The PPM MAAs of Southeastern (85.9%), SWT (87.5%) and Arriva Trains Wales (91.5%) continue to fall. Respectively, these are the lowest they have been since Q3 of 2005-06 (85.4%), Q1 of 2005-06 (85.0%) and Q2 of 2007-08 (90.7%).

Peak services:

The combined peak PPM MAA for the LSE sector in 2016-17 Q3 was 80.1%. Down 2.3 pp compared with the previous year, this is the lowest it has been since the time series began in 2010-11. At 94.1%, c2c ended Q3 with the highest peak MAA. However, it is down 1.9 pp compared with the previous year and the lowest it has been since Q2 of 2007-08 (94.3%).

The 69.5% recorded by GTR was the lowest peak MAA in 2016-17 Q3. SWT's peak PPM fell 3.2 pp year-on-year to end 2016-17 Q3 at 82.3%; the lowest it has been since Q1 of 2005-06 (81.4%).

Non-franchised operators:

Heathrow Express ended 2016-17 Q3 with an MAA of 90.9% which was down 0.8 pp compared with the previous year. Grand Central ended Q3 with an MAA of 84.5%, which was down 4.0 pp compared with the same time the previous year. The MAA for Hull Trains also fell by 4.0 pp to end Q3 at 82.7%.

- Quarterly PPM MAA by TOC data are available on the Data Portal in [Table 3.44](#)

European Comparisons

Comparisons with railways in the rest of Europe are available for the 2014 calendar year. For trains in the Regional and Scotland sector and LSE sector combined, 89.8% of services arrived within five minutes of their scheduled arrival time at their final destination. This ranks Britain 18th best out of 23 countries¹².

With 91.0% of long distance services arriving at their final destination within 15 minutes of their scheduled arrival time, Britain ranks 9th best out of 22 countries.

¹² [European Commission \(2016\)](#), pages 130-132

3. Cancellations and significant lateness (CaSL)



Cancellations and significant lateness (CaSL) 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. A lower score is better.

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 any station 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.

CaSL by Sector

2016-17 Quarter 3 CaSL Results

During 2016-17 Q3 the proportion of train services classified as cancelled or experiencing significant lateness was 4.4%. This was 0.8 pp worse than 2015-16 Q3 (3.6%) and was the second worst Q3 score since 2002-03 (the worst being 4.6% in 2010-11).

Up 1.4 pp compared with 2015-16 Q3, the LSE sector recorded a CaSL score of 5.3% in 2016-17 Q3. This was the worst Q3 score recorded by this sector since 2000-01 (9.3%). In Q3, GTR contributed 84%¹³ (or 0.6 pp) of the 0.8 pp increase in national CaSL and 82% (or 1.2 pp) of the 1.4 pp increase in the LSE CaSL.

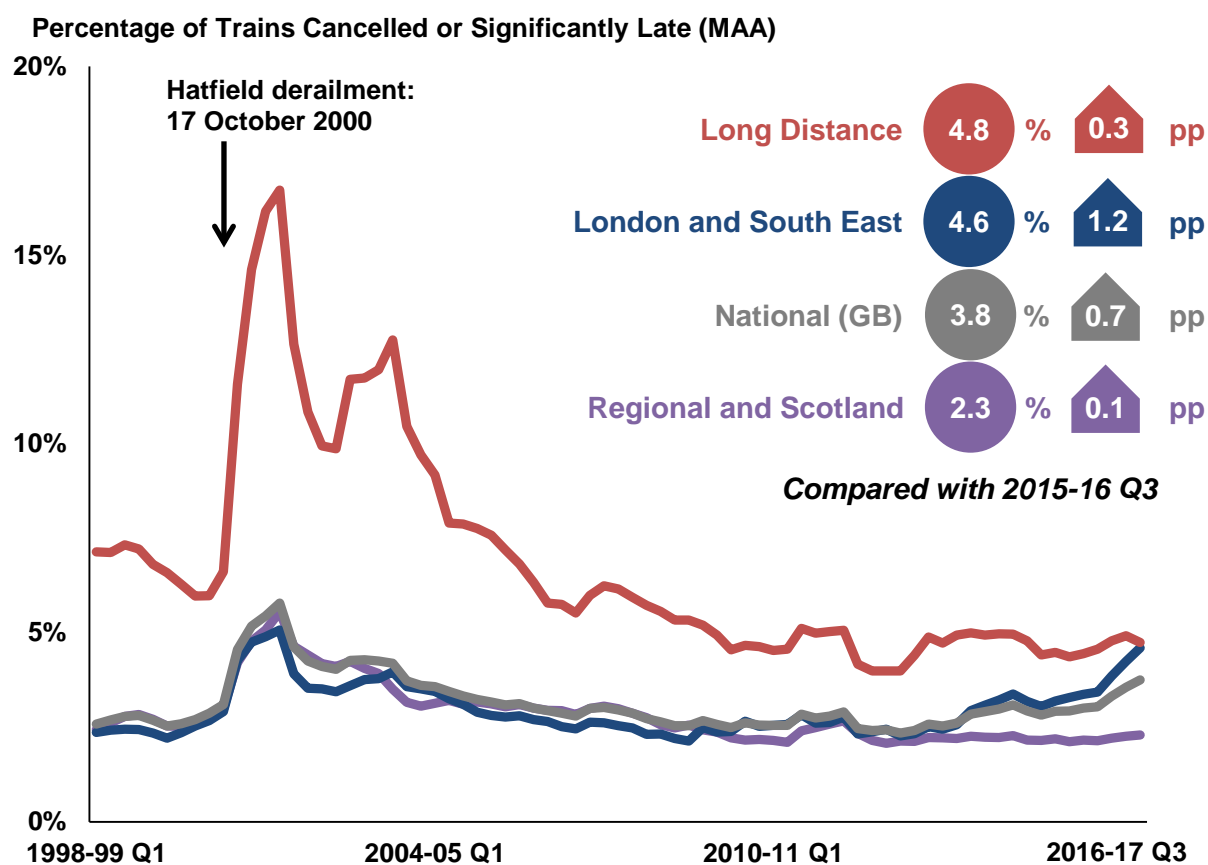
The 5.4% recorded in the Long Distance sector was down 0.6 pp compared with 2015-16 Q3. The Regional and Scotland sector had a CaSL score of 2.9% during 2016-17 Q3 which was up 0.1 pp compared with Q3 the previous year.

- Annual and quarterly CaSL by sector data are available on the Data Portal in [Table 3.6](#)

¹³ For more information on estimating this figure, please see the [methodology annex](#).

2016-17 Quarter 3 CaSL MAA Results

CaSL MAA by sector, Great Britain, 1998-99 Q1 to 2016-17 Q3 ([Table 3.5](#))



The national CaSL MAA in 2016-17 Q3 was 3.8%. Up 0.7 pp compared with 2015-16 Q3, this is the worst national MAA score recorded since Q2 of 2003-04 (4.2%). The national MAA peaked in Q2 of 2001-02 at 5.8%. It then decreased steadily to reach a best/low of 2.4% in Q2 of 2012-13. During 2013-14 the MAA deteriorated due to causes such as storms and flooding in the winter of 2013-14. The current MAA of 3.8% is 1.1 pp higher than the MAA recorded in Q2 of 2013-14 which was before the bad weather occurred.

The LSE sector Q3 MAA of 4.6% was up 1.2 pp compared with the previous year and is the highest MAA recorded since Q2 of 2001-02 (5.1%). GTR contributed 68%¹⁴ (or 0.5 pp) of the overall 0.7 pp increase in the national CaSL MAA and 75% (or 0.9 pp) of the 1.2 pp increase in the LSE CaSL MAA. The CaSL MAA of services in the Regional and Scotland sector recorded increased by 0.1 pp to end Q3 at 2.3%. The Long Distance sector ended the quarter with an MAA of 4.8%. This was up 0.3 pp compared with 2015-16 Q3.

■ Quarterly CaSL MAA by sector data are available on the Data Portal in [Table 3.5](#)

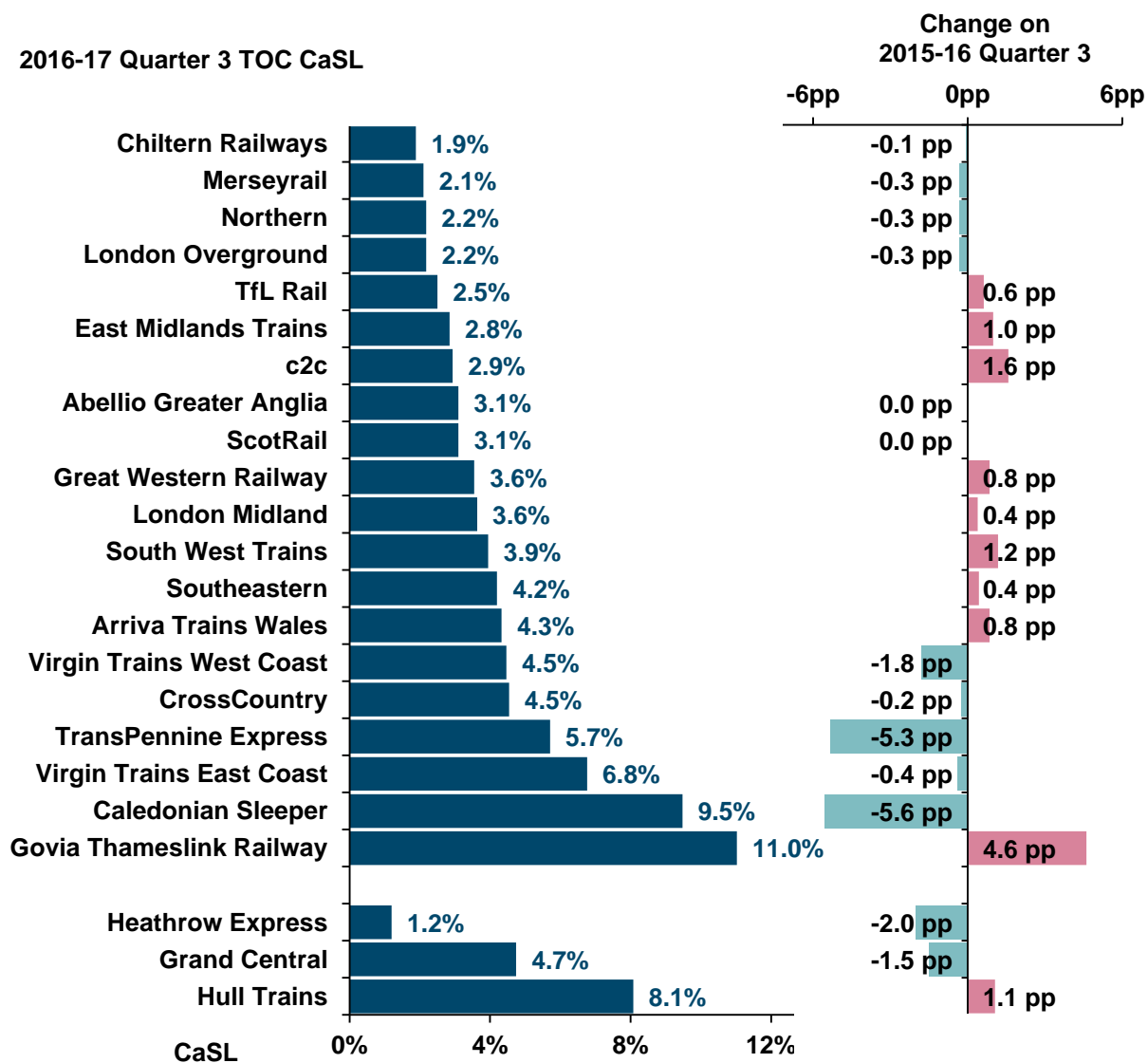
¹⁴ For more information on estimating this figure, please see the [methodology annex](#).

CaSL by TOC

Please refer to the [PPM section](#) above for details of changes to train operating companies.

2016-17 Quarter 3 CaSL Results by TOC

CaSL by TOC, Great Britain, 2015-16 Q3 and 2016-17 Q3 ([Table 3.7](#))



Chiltern achieved the best/lowest CaSL score in 2016-17 Q3 at 1.9%, which was 0.1 pp better than the previous year. Merseyrail improved upon last year's Q3 score of 2.4% to record the second lowest CaSL score this quarter. The 2.1% recorded this year was Merseyrail's best Q3 since 2009-10 (2.0%). Northern and London Overground (both 2.2%) recorded the third and fourth best CaSL scores this quarter.

GTR (11.0%) recorded the worst CaSL score in 2016-17 Q3. Up 4.6 pp compared with 2015-16 Q3, this was the highest CaSL score recorded by this TOC in any quarter since the time series began in 2004-05. Full cancellations accounted for 3.6 pp of the increase, with 42% of GTR CaSL failures¹⁵ in Q3 resulting from traincrew problems (29% the previous year). It should also be noted that GTR planned to run nearly 26,200 fewer trains (9.0%) in Q3 of 2016-17 compared with the same quarter the previous year¹⁶.

At 9.5%, Caledonian Sleeper recorded the second worst CaSL score in 2016-17 Q3. This was down 5.6 pp compared the same quarter the previous year which was largely due to the better weather in Q3 this year. Nevertheless, this TOC continues to suffer from technical failures with its fleet of trains. CaSL failures attributed to such problems were up 60% in Q3 compared with the previous year.

Having recorded the best quarterly CaSL score from 2014-15 Q3 to 2015-16 Q3, c2c recorded the seventh best CaSL score in Q3 of 2016-17. The score of 2.9% was 1.6 pp worse than the previous year and was their worst Q3 score since 2010-11 (4.1%). Similarly, the 4.3% scored by Arriva Trains Wales was up 0.8 pp compared with the previous year and was their worst Q3 since 2006-07 (4.6%).

Caledonian Sleeper (down 5.6 pp), TPE (5.3 pp) and VTWC (1.8 pp) all benefitted from the improved weather in 2016-17 Q3 compared with the previous year. The improvement on TPE was also down to fewer CaSL failures attributed to traincrew problems.

Non-franchised operators:

Of the non-franchised operators Grand Central recorded a CaSL score of 4.7% in 2016-17 Q3. This was 1.5 pp lower than the same quarter the previous year. By contrast, Hull Trains recorded a CaSL of 8.1% which was up 1.1 pp on the previous year. This was a result of an increase in CaSL failures attributed to overhead line equipment failures and technical problems with the trains of other operators.

Heathrow Express recorded a CaSL score of 1.2% in Q3 which was down 2.0 pp compared with the same quarter the previous year.

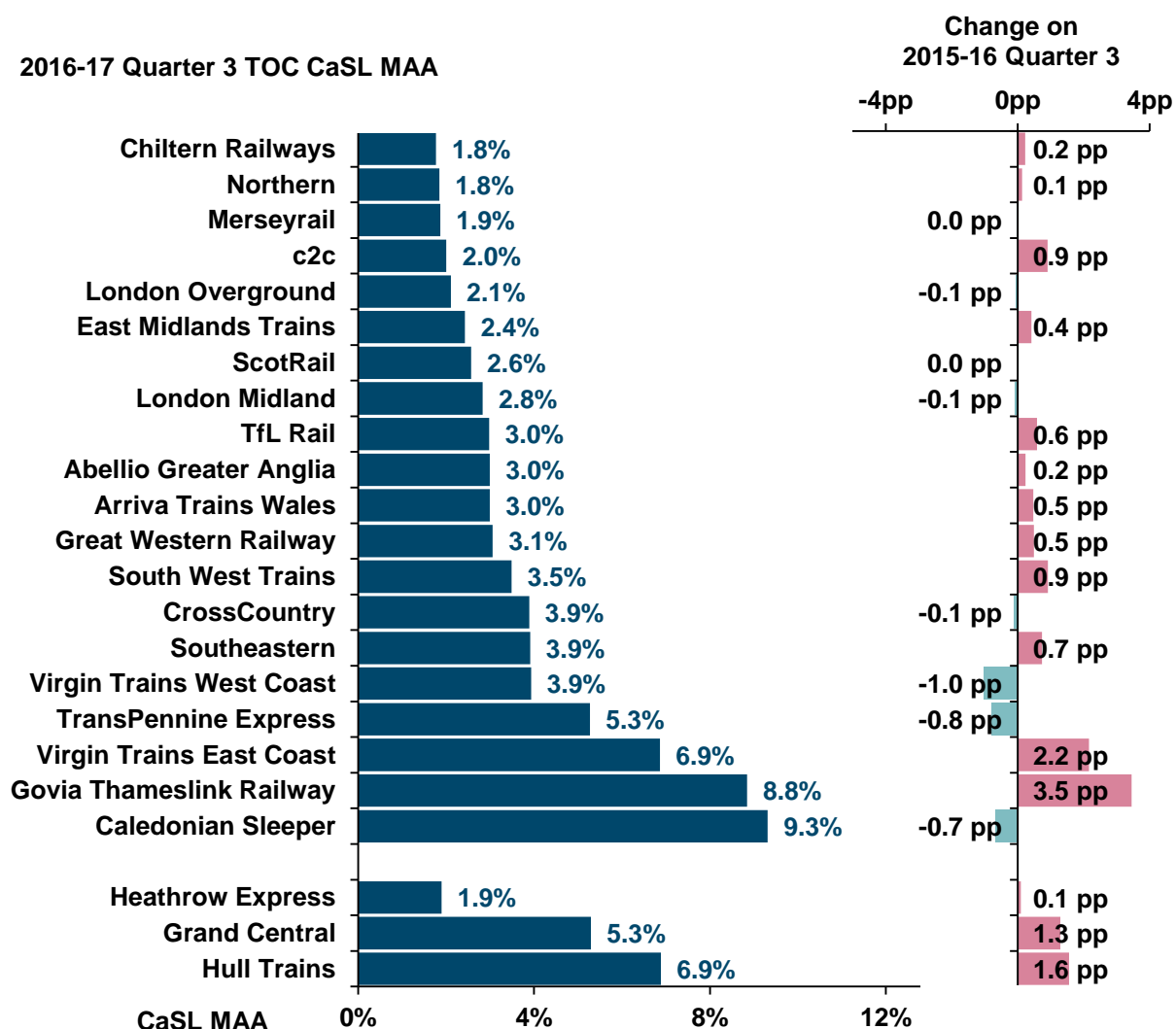
- Quarterly CaSL by TOC data are available on the Data Portal in [Table 3.7](#)

¹⁵ 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.

¹⁶ [Data Portal – disaggregated GTR data](#)

2016-17 Quarter 3 CaSL MAA Results by TOC

CaSL MAA by TOC, Great Britain, 2015-16 Q3 and 2016-17 Q3 ([Table 3.7](#))



For the first time since Q2 of 2011-12, c2c did not record the lowest CaSL MAA. They ended Q3 of 2016-17 with an MAA of 2.0% which is the highest it has been since Q2 of 2011-12 (2.2%). Their place at the top was taken by Chiltern who ended the quarter with an MAA of 1.8%, with Northern (1.8%) and Merseyrail (1.9%) in second and third place respectively.

At 9.3%, Caledonian Sleeper had the worst CaSL MAA at the end of 2016-17 Q3. GTR (8.8%) and VTEC (6.9%) also recorded CaSL MAAs above 6% at the end of Q3. For GTR this is a record high CaSL MAA. SWT ended Q3 with a CaSL MAA of 3.5% which is the highest it has been since Q3 of 2004-05 (3.5%).

VTWC ended Q3 with an MAA of 3.9%. Down 1.0 pp compared with the 2015-16 Q3, this lowest score recorded since the time series began in 1997-98. This is due to

improvements by both Network Rail (fewer overhead line equipment, signal and track failures) and the TOC (fewer fleet failures and traincrew problems). TPE (down 0.8 pp) and Caledonian Sleeper (0.7 pp) also recorded significantly improved CaSL MAAs at the end of 2016-17 Q3.

Non-franchised operators:

All the non-franchised operators recorded worse CaSL MAAs in 2016-17 Q3 than the same quarter the previous year. Up 1.6 pp, Hull Trains had the highest MAA in Q3 at 6.9%. This was followed by Grand Central which recorded an MAA of 5.3% - an increase of 1.3 pp. The MAA of 1.9% for Heathrow Express was up 0.1 pp compared with the previous year.

- Quarterly CaSL MAA by TOC data are available on the Data Portal in [Table 3.7](#)

European Comparisons

Comparisons with railways in the rest of Europe are available for the 2014 calendar year. For trains in the Regional and Scotland sector and LSE sector combined, 2.6% of services were cancelled (including part cancellations). This ranks Britain 17th best out of 20 countries¹⁷. With 3.1% of long distance services cancelled, Britain ranks 16th best out of 19 countries.

¹⁷ [European Commission \(2016\)](#), pages 132-133



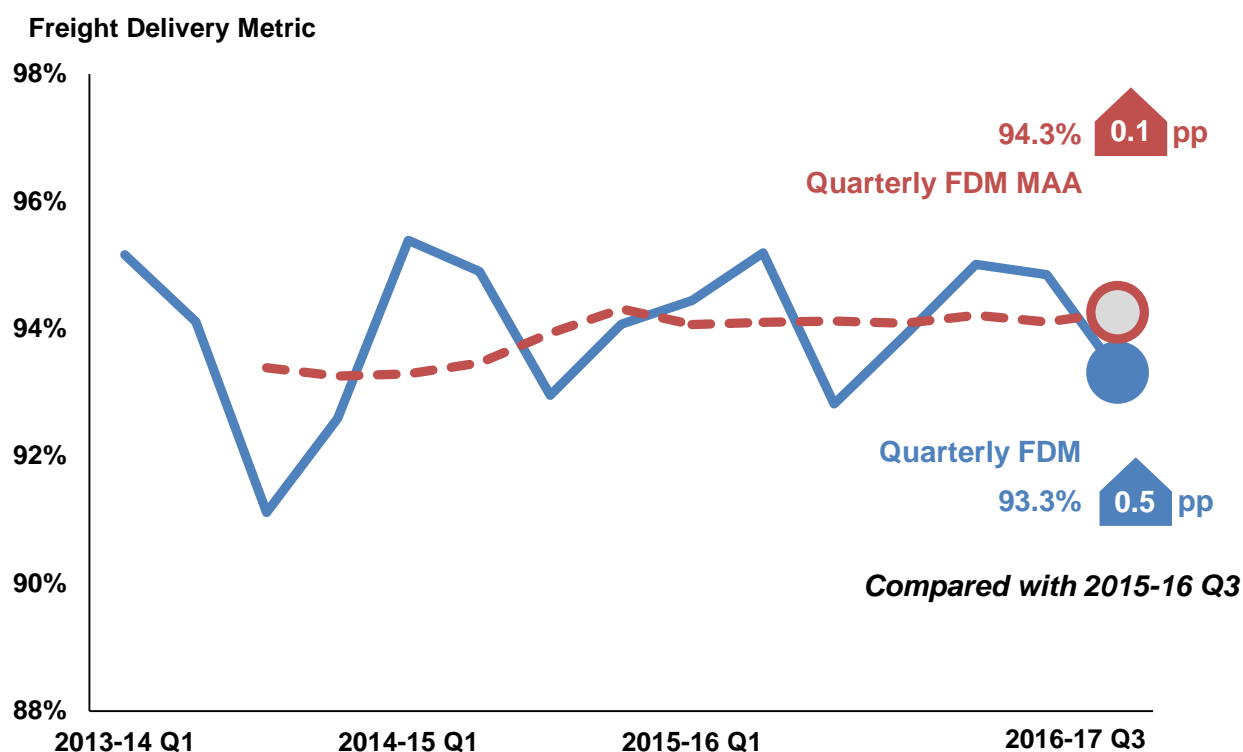
4. Freight Delivery Metric

Freight Delivery Metric (FDM) is the percentage of freight trains that arrived 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. A higher score is better.

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.

2016-17 Quarter 3 FDM Results

FDM, Great Britain, 2013-14 Q1 to 2016-17 Q3 ([Table 3.41](#))



At 93.3%, FDM was 0.5 pp higher in 2016-17 Q3 than the same quarter the previous year. The FDM MAA ended Q3 at 94.3%, which up 0.1 pp compared with the previous year.

- Quarterly FDM data are available on the Data Portal in [Table 3.41](#).
- Quarterly FPM data up to 2014-15 are available on the Data Portal in [Table 3.50](#).

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 2015-16 (annual) and 1997-98 Q1 to 2016-17 Q3 (quarterly) – [Table 3.43](#);
- PPM (MAA) by sector, 1997-98 Q4 to 2016-17 Q3 (quarterly) – [Table 3.42](#);
- PPM by TOC, 1997-98 Q1 to 2016-17 Q3 (quarterly) – [Table 3.44](#); and
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2016-17 Period 10 (periodic) – [Data Portal](#) ([Table 3.9](#) (All TOCs) to [Table 3.29](#) (Caledonian Sleeper)

CaSL

- CaSL by sector, 1997-98 to 2015-16 (annual) and 1997-98 Q1 to 2016-17 Q3 (quarterly) – [Table 3.6](#);
- CaSL (MAA) by sector, 1997-98 Q4 to 2016-17 Q3 (quarterly) – [Table 3.5](#); and
- CaSL by TOC, 1997-98 Q1 to 2016-17 Q3 (quarterly) – [Table 3.7](#)
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2016-17 Period 10 (periodic) – [Data Portal](#) ([Table 3.9](#) (All TOCs) to [Table 3.29](#) (Caledonian Sleeper)

FDM

- FDM, 2013-14 Q1 to 2016-17 Q3 (quarterly) – [Table 3.41](#)

Revisions: One revision has been made since the 2016-17 Q2 publication. This revised some of the text on pages 2 and 3 of the [Statistical Release](#). Further details on historic revisions to the data set can be found in the [Revisions Log](#).

Annex 2 – 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;
- Key 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](#).

Annex 3 – Methodology: Impact of GTR Services

National performance has declined in the last year. As an example, the extent to which performance of GTR services contributed to the decline in Q3 PPM was estimated using the calculations set out below and in the table A. Table B shows the results of these calculations for PPM, CaSL and the MAAs in 2016-17 Q3.

GTR services were separated from the rest of the operators in Great Britain and for both groups a “stand still” number of trains meeting PPM was calculated by multiplying the PPM for last year with the trains planned for this year. This is to account for the changes in trains planned by GTR and the rest of the operators. The difference between the stand still figure and the actual number of trains that met PPM provides the contribution of each part to the overall change in performance. For the quarterly PPM, the 18,829 extra GTR PPM failures represent 86% of the extra failures in total. In percentage point terms this is equal to 0.9 pp of the overall 1.1 pp fall in PPM recorded in Q3 of 2016-17.

Table A: Q3 PPM, National (excluding GTR) and GTR, 2015-16 and 2016-17

PPM	National (GB) excluding GTR			GTR		
	Trains Planned	Met PPM	PPM	Trains Planned	Met PPM	PPM
2015-16 Q3	1,529,610	1,334,051	87.2%	291,677	221,253	75.9%
2016-17 Q3	1,539,399	1,339,438	87.0%	265,502	182,569	68.8%
Change	9,789	5,387	-0.2 pp	-26,175	-38,685	-7.1 pp
To stand still		1,342,588			201,398	
Extra Failures		3,150			18,829	
Extra Failures (share)		14.3%			85.7%	
PPM Change (pp)		-0.2			-0.9	

Table B: Contributions to Q3 PPM and CaSL Changes, National, 2015-16 and 2016-17

Type	Metric	National (GB) excluding GTR		GTR	
		% Share	PP Change	% Share	PP Change
Quarterly	Trains Planned (16-17)	85.3%	-	14.7%	-
	PPM	14.3%	-0.2 pp	85.7%	-0.9 pp
	CaSL	16.0%	0.1 pp	84.0%	0.6 pp
MAA	Trains Planned (16-17)	84.8%	-	15.2%	-
	PPM	36.5%	-0.6 pp	63.5%	-1.0 pp
	CaSL	31.5%	0.2 pp	68.5%	0.5 pp



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