



# Freight Rail Usage

## 2017-18 Q1 Statistical Release

Publication date: 28 September 2017

Next publication date: 21 December 2017

### Background

This release contains information on rail freight usage in Great Britain with the latest quarterly data referring to April, May and June of 2017.

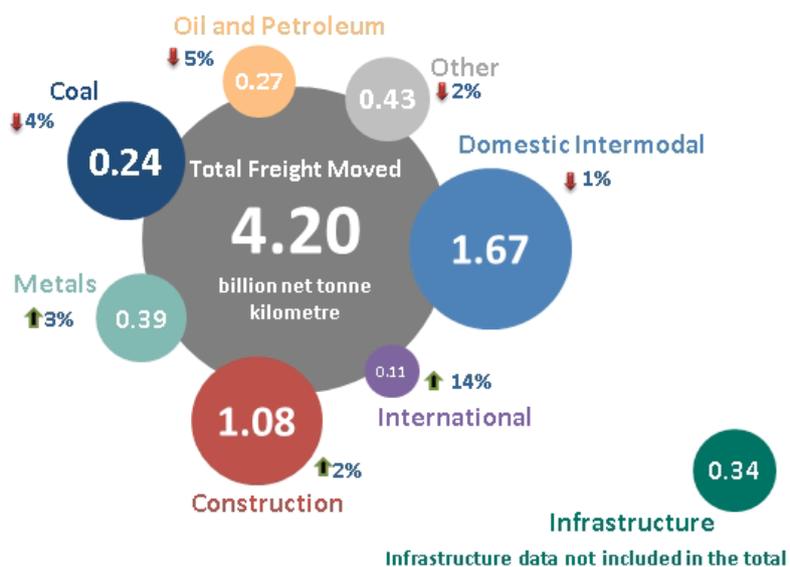
The statistics cover **freight moved** (disaggregated by seven commodities), **freight lifted**, **freight delays per 100 train km**, **freight train kilometres by operator**. This release also contains the annual **freight market indicators** which show comparisons with other modes of transport (these have not been updated this quarter). Data are sourced from Network Rail, Freight Operating Companies (FOCs) and Department for Transport (DfT).

### Contents

- [Freight moved – page 2](#)
- [Freight lifted – page 7](#)
- [Freight delay per 100 train km – page 10](#)
- [Freight train kilometres by operator – page 11](#)
- [Freight market indicators – page 13](#)
- [Annexes – page 15](#)

The volume of rail freight moved remained unchanged compared to the first quarter of the previous year.

### Freight moved by commodity, Great Britain, 2017-18 Q1



The total volume of rail **freight moved** in 2017-18 Q1 was unchanged to 2016-17 Q1, with 4.2 billion net tonne kilometres. The volume of rail freight moved **Coal** recorded the lowest amount for any quarter with 0.24 billion net tonne kilometres.

The total amount of **freight lifted** in 2017-18 Q1 was 18.7 million tonnes, a reduction of 3% on the same quarter last year. This is the lowest total since the start of the time series in 1996-97 Q1.

Normalised **freight delay** in 2017-18 Q1 rose to 10.0 minutes per 100 train kilometres, an increase of 3% compared to 2016-17 Q1.

Total **freight train kilometres** fell to 8 million kilometres, a decrease of 2% (0.2 million kilometres) compared to 2016-17 Q1. This is the lowest amount recorded since the time series began in 2010-11 Q1.

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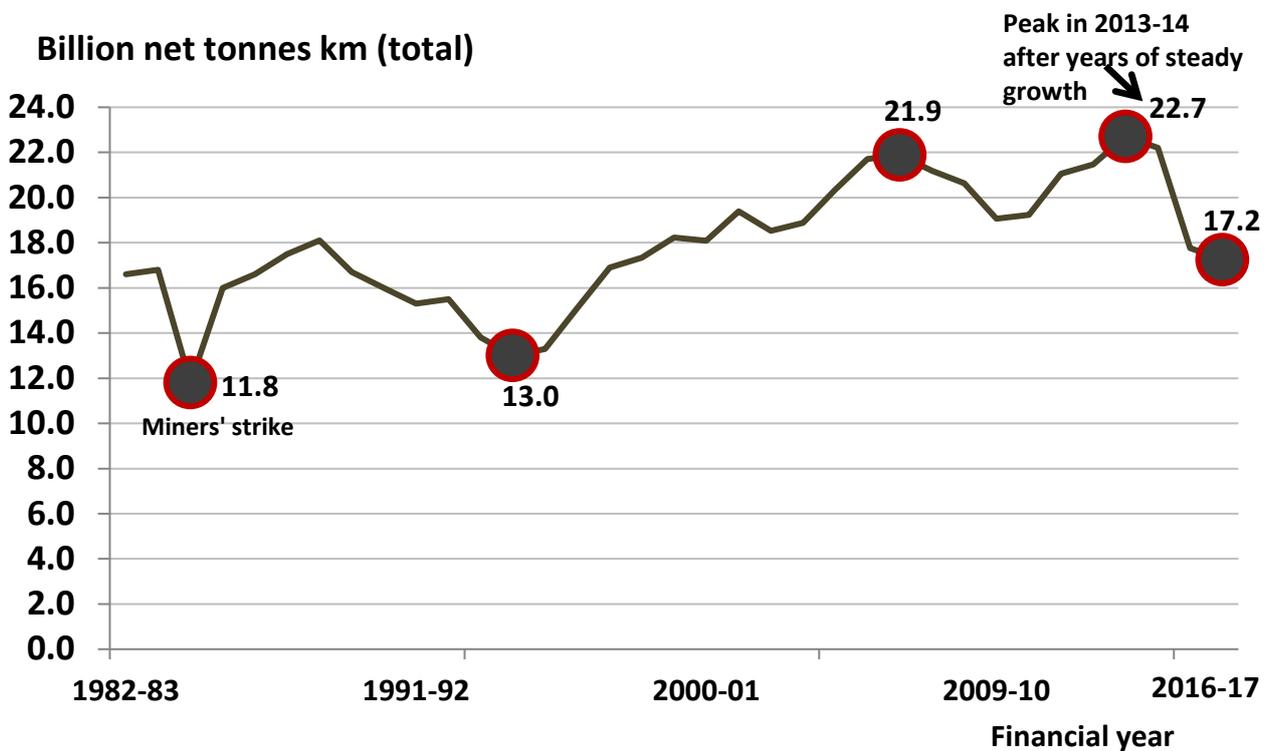
# 1. Freight moved



## Annual 2016-17

The total volume of rail freight moved fell to 17.2 billion net tonne kilometres in 2016-17, a 3% reduction on 2015-16.

The volume of rail **Freight moved (total)** – chart ([Table 13.7](#))  
Great Britain data 1982-83 to 2016-17



More detailed analysis of the annual data can be found in the [2016-17 Q4 statistical](#)

**Freight moved** data, measured in net tonne kilometres, shows the amount of freight which is moved on the railway network, taking into account the weight of the load and the distance carried.

Freight moved is disaggregated by seven commodities which are also summed to provide an overall total freight moved. The seven commodities are coal, metals, construction, oil and petroleum, international, domestic intermodal and other.

In addition to the seven commodities listed above the amount of goods used for railway engineering work is also reported, under the 'infrastructure' category. This is not included in the totals published in the freight moved tables and charts.

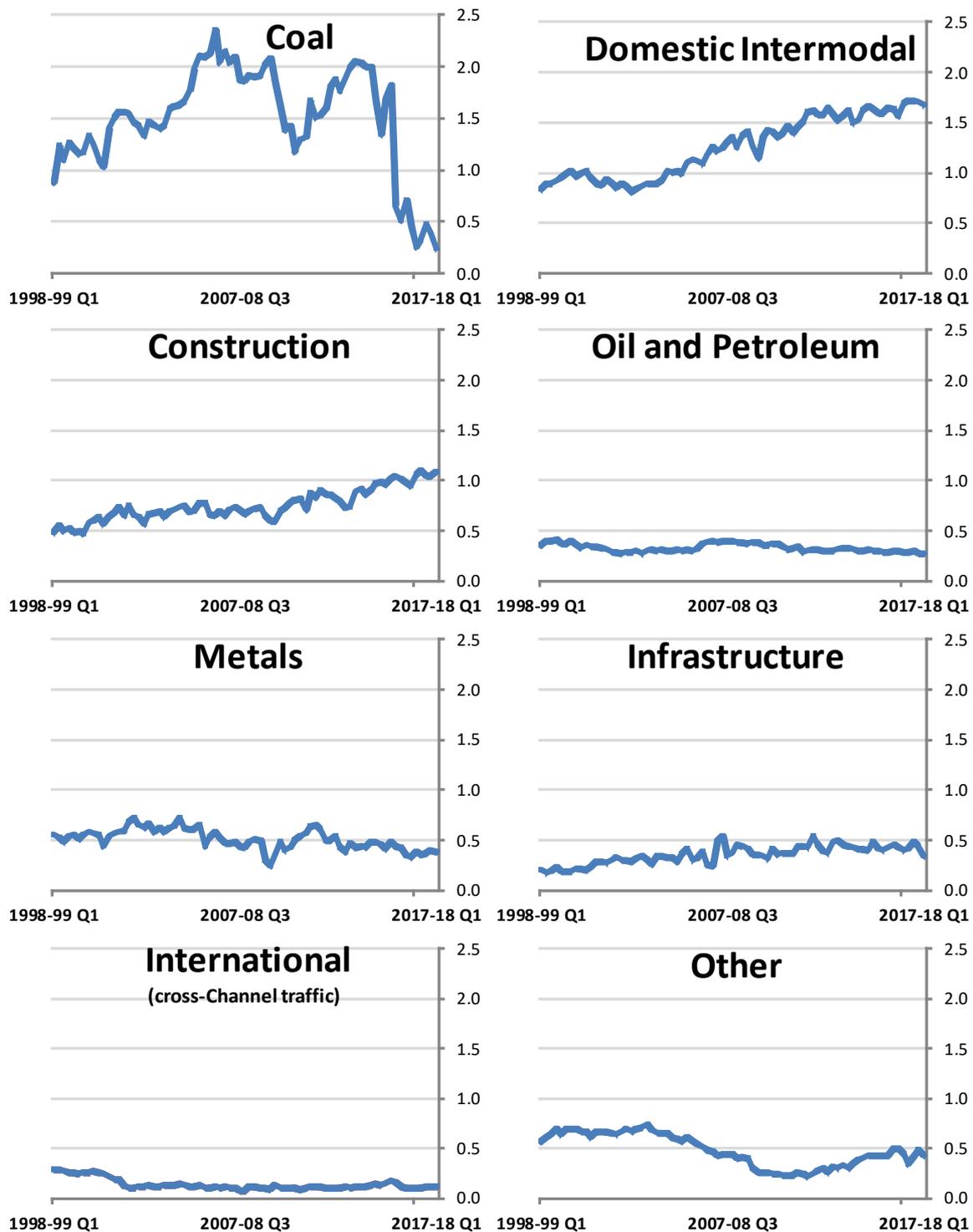
[release..](#)

## 2017-18 Quarter 1 Results

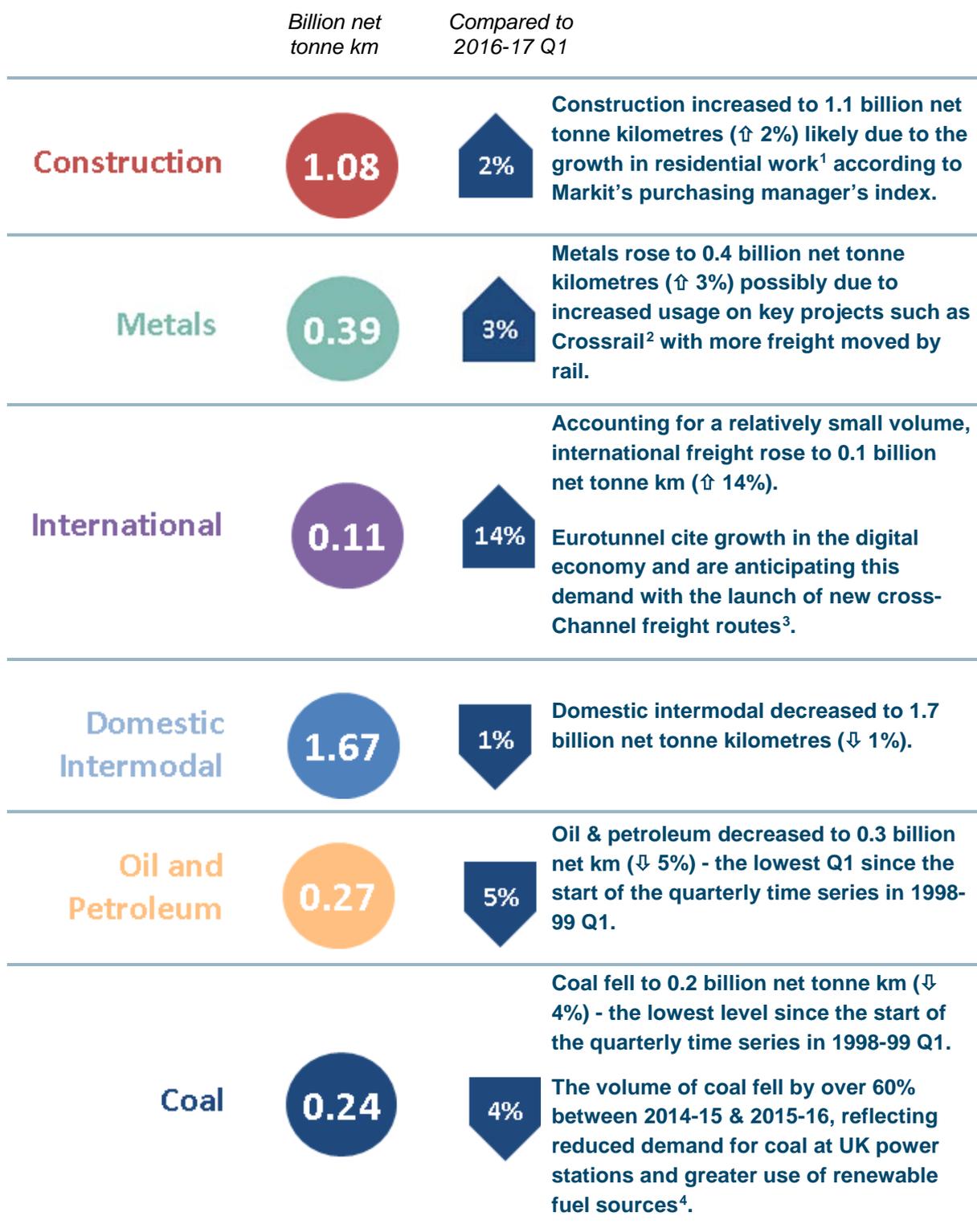
In 2017-18 Q1, total freight moved was unchanged compared to the same quarter last year, recording 4.2 billion net tonne kilometres. This is the second lowest Q1 (and third lowest across all quarters) since the start of the quarterly time series in 1998-99 Q1.

The volume of **Freight moved** (billion net tonne km), Great Britain, 1998-99 Q1 to 2017-18 Q1

[\(Table 13.7\)](#)



## Rail freight moved (2017-18 Q1, Great Britain)



<sup>1</sup> <http://www.cityam.com/265851/jump-housebuilding-pushed-uk-construction-17-month-high-may>

<sup>2</sup> <https://www.theguardian.com/business/2017/jun/01/reborn-british-steel-gives-shares-to-workers-after-return-to-profit>

<sup>3</sup> <http://www.eurotunnelgroup.com/uploadedFiles/assets-uk/Media/Press-Releases/2017-Press-Release/170725-2017-half-year-results-Eurotunnel-Group.pdf> (Press Release, page 5, fixed link traffic, second quarter (April-June), Rail Freight)

<sup>4</sup> <http://www.bbc.co.uk/news/business-34851718>

*Billion net  
tonne km*

*Compared to  
2016-17 Q1*

Other

0.43

2%

Other recorded a reduction to 0.4 billion net tonne km (↓ 2%).

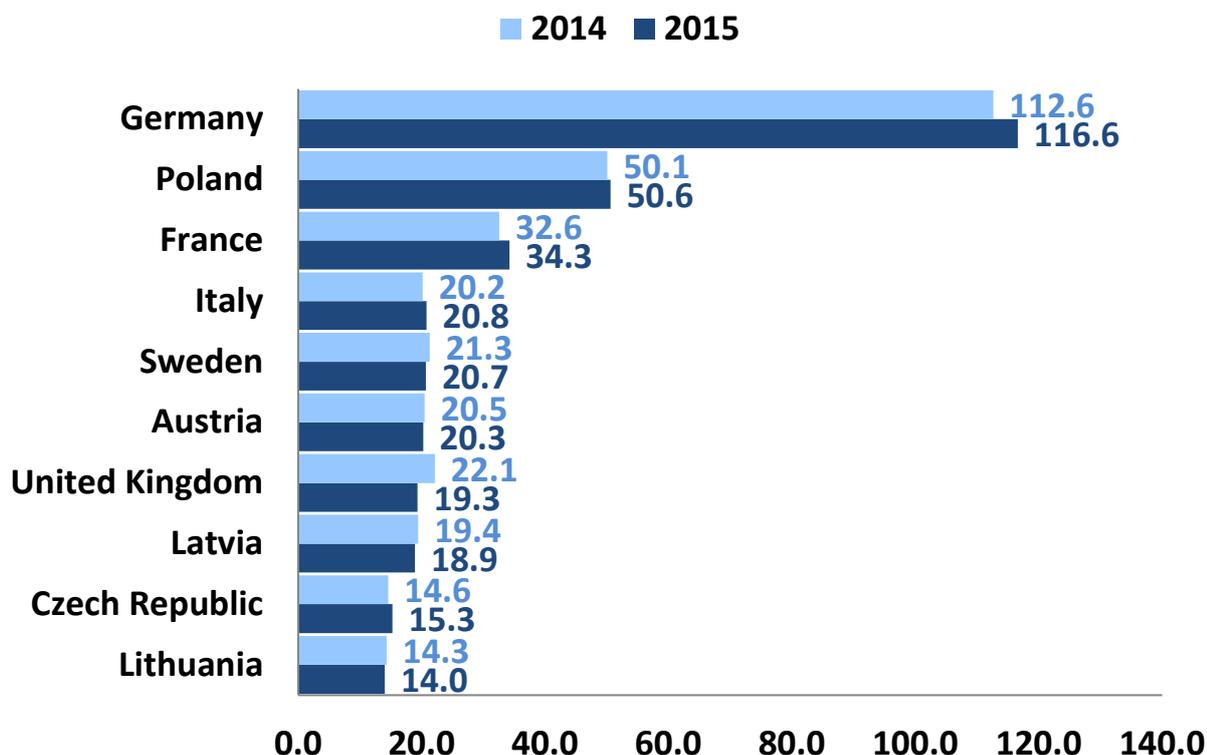
Construction and domestic intermodal combined accounted for around two-thirds of total rail freight moved this quarter: the second largest proportion since the start of the quarterly time series in 1998-99 Q1.

- Quarterly freight moved data are available on the data portal in: [Table 13.7](#)

## European comparison

In 2015<sup>5</sup>, 19.3 billion net tonne kilometres rail freight were moved in the UK. This resulted in the UK ranked 7th for the volume of rail freight moved on the network.

### Top 10 European countries ranked by rail freight moved (billion net tonne kilometres) in 2015



31 of the 34 member countries have submitted data to Eurostat for both 2014 and 2015. Over the same period, rail freight moved in the EU increased by 1% compared with a 13% fall in the UK. Just under half of the member countries (15) contributed to that growth.

In terms of market size, two member countries account for just under 40% rail freight moved: Germany (27%) and Poland (12%), the remaining member states each account for 8% or less.

<sup>5</sup> Data provided to Eurostat for calendar years. Source: <http://ec.europa.eu/eurostat/data/database>, theme -> transport -> railway transport -> railway transport measurement – goods -> Railway transport - goods transport rail, unit (million tonne-kilometre (tkm)).

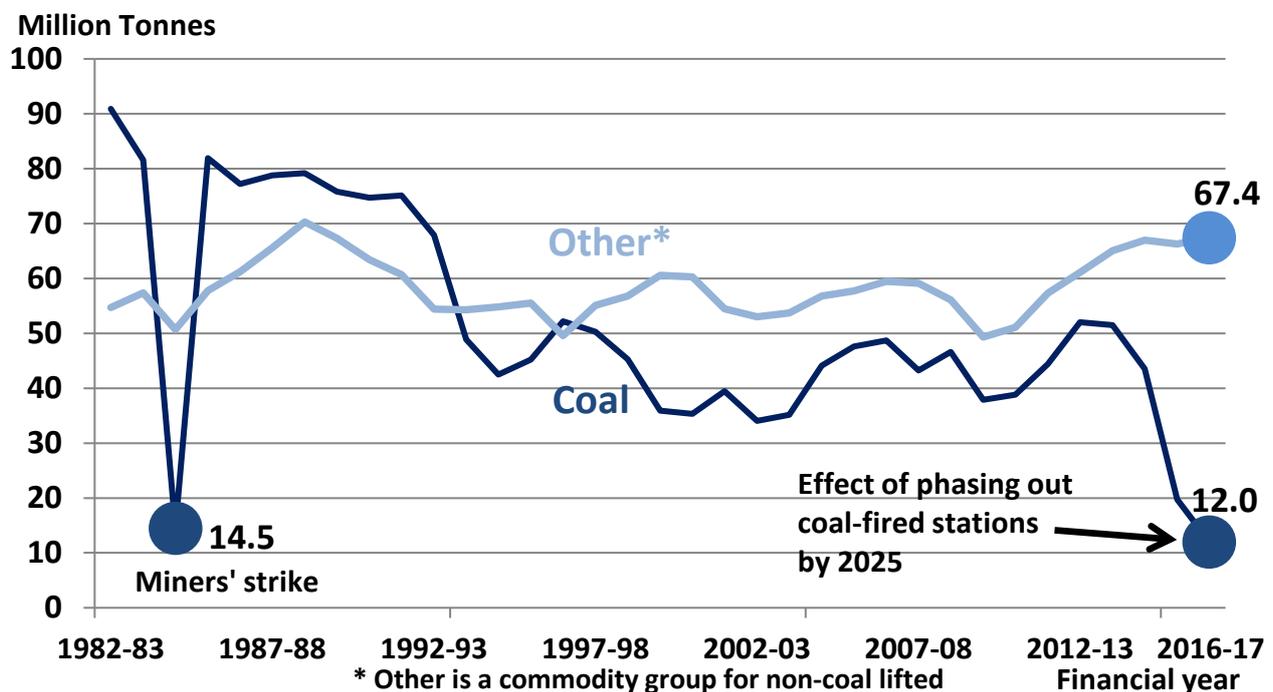
## 2. Freight lifted



### Annual 2016-17

In 2016-17, the total amount of freight lifted in Great Britain fell to 79.4 million tonnes, the lowest since 1984-85, an 8% decrease on 2015-16. The fall was largely driven by the decline in coal freight.

The mass of rail **Freight lifted** – chart ([Table 13.6](#)) Great Britain data 1982-83 to 2016-17



More detailed analysis of the annual data can be found in the [2016-17 Q4 statistical release](#).

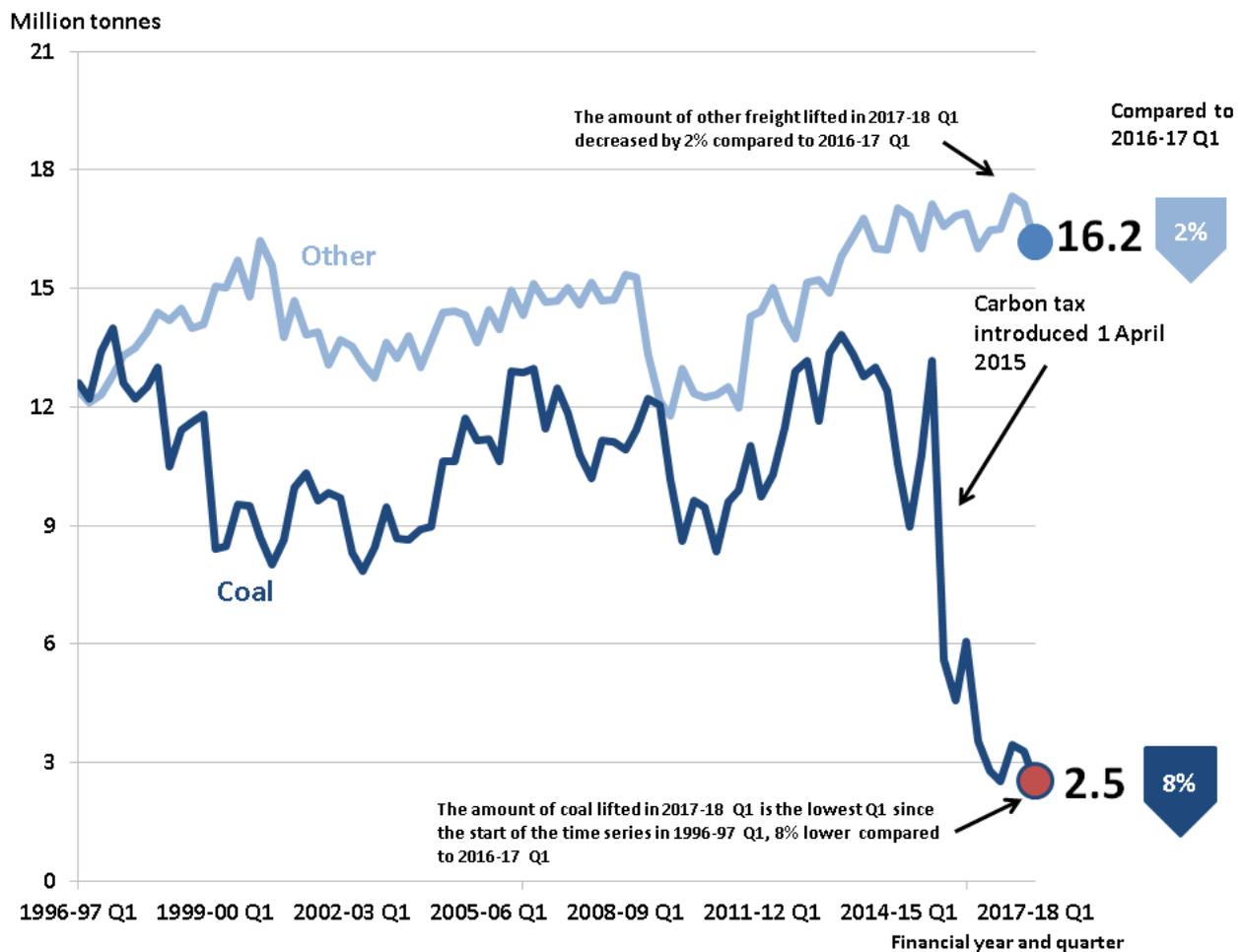
**Freight lifted** is the mass of goods carried on the rail network measured in tonnes, excluding the weight of the locomotives and wagons. Unlike freight moved it takes no account of the distance travelled.

Freight lifted information is sourced from the four major FOCs: DB Schenker Rail (formerly EWS), Freightliner Ltd (formerly the BR container business), Direct Rail Services (DRS) and GB Railfreight.

## 2017-18 Quarter 1 Results

The total amount of freight lifted in 2017-18 Q1 was 18.7 million tonnes, a decrease of 3% compared to 2016-17 Q1. This total is the lowest across all quarters since the start of the time series in 1996-97 Q1.

Freight lifted (million tonnes), Great Britain, 1996-97 Q1 to 2017-18 Q1 ([Table 13.6](#))



■ Quarterly freight lifted data are available on the data portal in: [Table 13.6](#)

## European comparison

In 2015<sup>6</sup>, 96.8 million tonnes rail freight lifted in the UK, a fall of 11% on 2014, with the total freight lifted in the EU falling by 1% between 2014 and 2015.

The UK ranked 5th for rail freight lifted volumes, slipping two places from last year. The countries ranked ahead of the UK were: Germany (367.3 million tonnes, ↑ 1%), Poland (224.3 million tonnes, ↓ 2%), Austria (97.6 million tonnes, ↓ 1%) and Czech Republic (97.3 million tonnes, ↑ 6%).

As with rail freight moved, 31 of the 34 member countries have submitted data to Eurostat for both 2014 and 2015.

The fall in total rail freight lifted in the EU between the two years is offset by growth in 14 member countries during the same period.

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<sup>6</sup> Data provided to Eurostat for calendar years. Source: <http://ec.europa.eu/eurostat/data/database>, theme -> transport -> railway transport -> railway transport measurement – goods -> Railway transport - goods transport rail, unit (thousand tonnes)..

# 3. Freight delay per 100 train kilometres



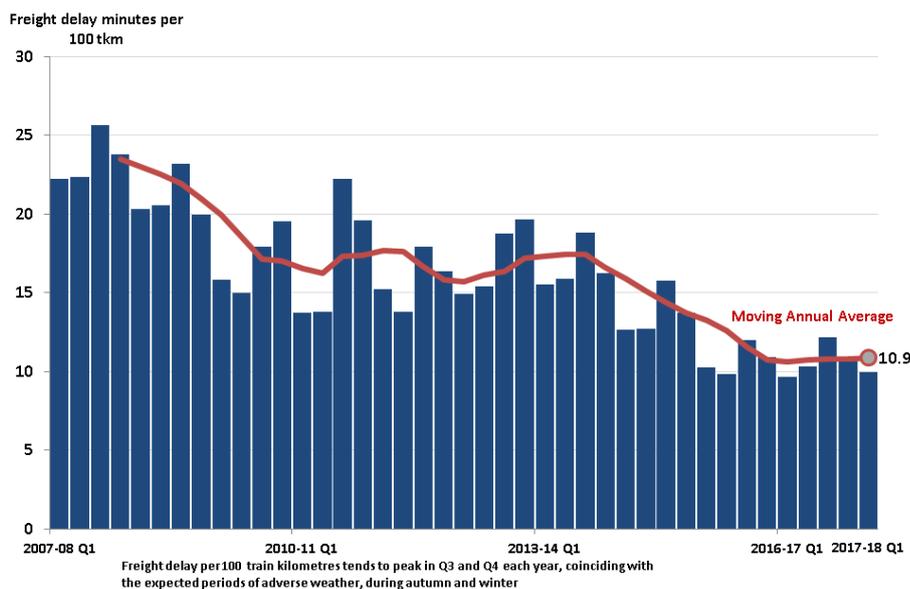
## Annual 2016-17

Normalised freight delay increased marginally by 0.1% to 10.8 minutes in 2016-17. For more information, please see the [2016-17 Q4 statistical release](#).

## 2017-18 Quarter 1 Results

Freight delay recorded 10.0 minutes per 100 train kilometres, an increase of 3% compared to last year. This is the second lowest minutes per 100 train kilometres (2016-17 Q1 being the lowest) since the start of the time series in 2007-08 Q1.

Normalised **Freight delay per 100 train kilometres**, Great Britain, 2007-08 Q1 to 2017-18 Q1 ([Table 13.5](#))



(P) This dataset is provisional as delay data is often revised as part of the delay attribution process (please see the [Freight Rail Usage quality report](#) for further details).

■ Quarterly freight delays per 100 train km data are available on the data portal: [Table 13.5](#)

**Freight delay per 100 train kilometres** is a normalised measure of delay experienced by FOCs.

The measure is calculated from the total delay experienced by all GB freight operators divided by their train mileage.

Freight train mileage can fluctuate depending on demand so a normalised measure allows for comparison over time regardless of changing levels of freight traffic on the network.

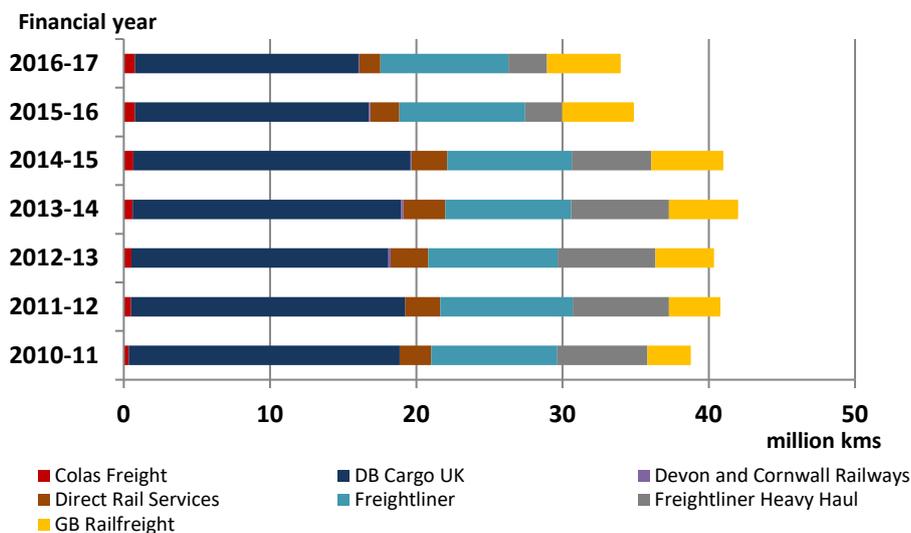
**Freight Delivery Metric (FDM)** is another measure of freight train delay. It is based on the percentage of freight trains that arrive at their destination within 15 minutes of their scheduled arrival time. Results and more information can be found in the quarterly [Passenger and Freight Rail Performance statistical release](#).

## 4. Freight train kilometres by operator

### Annual 2016-17

In 2016-17, total freight train kilometres fell to 34 million kilometres, a reduction of less than 1 million kilometres (↓ 3%) compared to 2015-16. This is the lowest amount recorded since the time series began in 2010-11.

Freight train kilometres by FOC, Great Britain, 2010-11 to 2016-17 ([Table 13.25](#))



For more information, please see the [2016-17 Q4 statistical release](#).

Freight train kilometres by operator data cover FOCs on Network Rail infrastructure and were included for the first time in the [2015-16 Q4 statistical release](#)

#### Freight train kilometres

is the actual mileage in kilometres operated by FOCs on Network Rail infrastructure

The data is sourced from Network Rail's Track Access Billing System (TABS) and covers only the mileages charged through TABS.

Competition between freight operators means we would expect a greater level of variation in mileage from year to year than in the passenger market.

Not all freight operators have been in operation throughout the time-series, therefore total year on year comparison should be treated with caution.

Please see the accompanying [quality report](#) for more information.

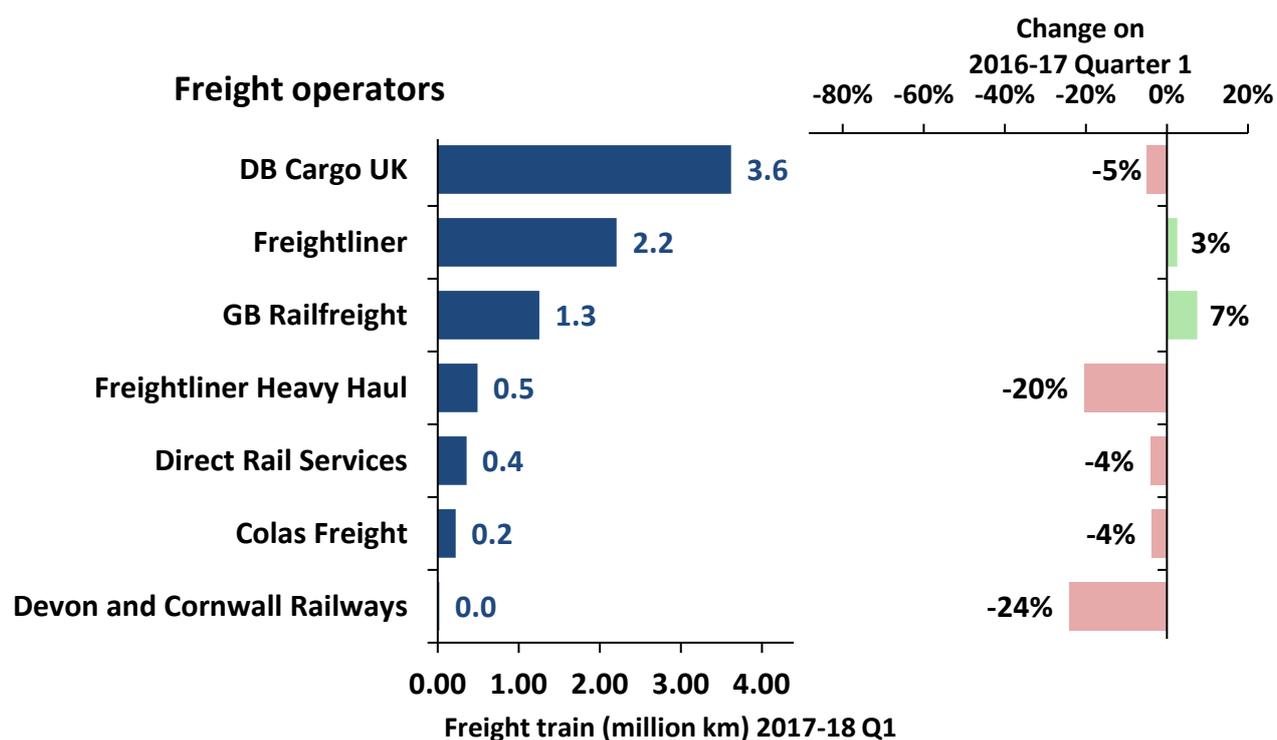
## 2017-18 Quarter 1 Results

During 2017-18 Q1, total freight train kilometres recorded 8 million kilometres, a fall of 0.2 million kilometres (↓ 2%) compared to the same quarter last year. This is the lowest total across all quarters since the start of the time series in 2010-11 Q1.

DB Cargo UK and Freightliner Heavy Haul recorded the lowest amount of freight train kilometres since the start of the time series with 3.6 and 0.5 million kilometres respectively this quarter. This is partly due to changes in the supply of specific freight contracts for moved supplies<sup>7</sup>.

DB Cargo UK and Freightliner Intermodal accounted for just over 70% of the freight train kilometres in 2017-18 Q1.

Freight train kilometres by FOC, Great Britain, 2017-18 Q1 ([Table 13.25](#))



■ Quarterly freight kilometres by operator data are available on the data portal in: [Table 13.25](#)

<sup>7</sup> <https://www.railwaymagazine.co.uk/gb-railfreight-wins-new-work-from-mod-and-hitachi/>

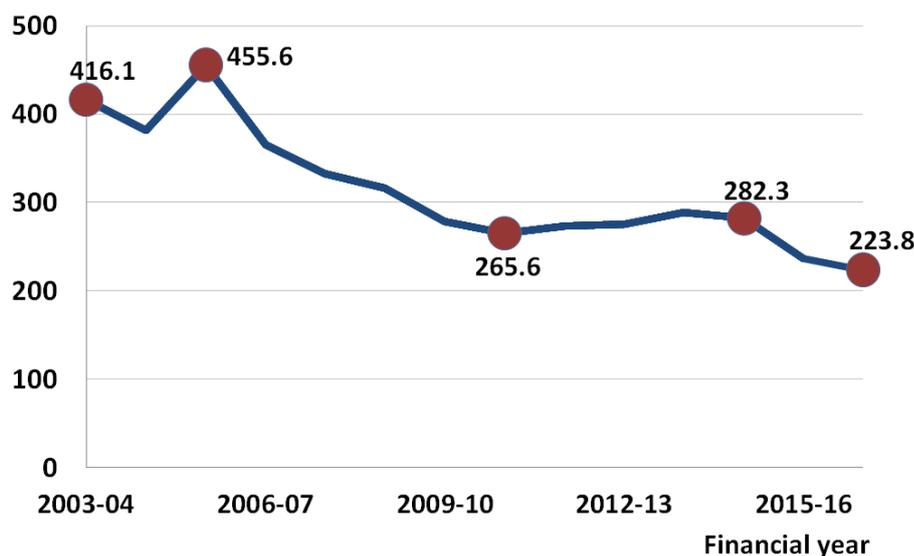
## 5. Freight market indicators

Freight market indicators comprise three measures: number of freight train movements on the network (data available up to 2016-17), impact on road haulage (2015-16), and rail market share (calendar year 2015). This section is unchanged from the [2016-17 Q4 statistical release](#).

### Number of freight train movements

Number of freight train movements, Great Britain, 2003-04 to 2016-17 ([Table 13.10](#))

Number of freight trains movement  
(Thousands)



#### Number of freight train movements

shows the volume of freight trains on the railway network each year.

The data is sourced from Network Rail and is based on chargeable train movements.

During 2016-17, the number of freight movements recorded 224,000, the lowest since the start of the time series in 2003-04, a decrease of 5% compared to 2015-16. The fall in coal traffic over the year part explains the reduction in freight movement by rail.

■ Annual freight train movement data are available on the data portal in: [Table 13.10](#)

## Impact on road haulage

In 2015-16, the number of lorry kilometres required to transport the amount of freight moved by rail was 1.7 billion kilometres, a 19% decrease on 2014-15. This is the lowest recorded since the start of the time series in 2004-05

There were 7.8 million lorry journeys avoided in 2015-16 through the use of rail freight, 21% lower than the previous year. 2015-16 is the lowest number of avoided lorry journeys recorded since 2004-05.

- Annual impact on road haulage data are available on the data portal in: [Table 13.8](#)

## Rail market share

In 2015, 5% of all freight lifted<sup>8</sup> was on rail, with 97 million tonnes. The proportion of freight lifted on the rail network fell by 1.2 percentage points compared to 2014. Between 2014 and 2015, road freight (HGV) increased by 1.4 percentage points.

In 2015, 10% of all freight moved was on the railway network, with 19 billion net tonne kilometres. The proportion of freight moved by rail decreased by 2.4 percentage points compared to the previous year. Between 2014 and 2015, road freight (HGV) increased by 1.6 percentage points.

- Annual rail market share data are available on the data portal in: [Table 13.12](#)

### Impact on road haulage

consists of two measures; **rail freight lorry kilometres equivalent** and **avoided lorry journeys**.

### Rail freight lorry kilometres equivalent

measures an equivalent distance that road vehicles (HGVs) would need to have travelled to move the amounts of freight carried on rail.

### Avoided lorry journeys is

the equivalent number of road vehicle trips necessary to move the freight.

### Rail market share

statistics show the volumes of freight moved and freight lifted on different modes of transport; rail, road, pipeline and water.

Road data is now calculated based on HGVs only as data for other vehicle types no longer available.

Pipeline data is not available after 2011 therefore it has been excluded from the annual totals and the calculations of market share.

<sup>8</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/546346/domestic-road-freight-statistics-2015.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/546346/domestic-road-freight-statistics-2015.pdf)

# 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.

## Freight moved

- Freight moved, 1982-83 to 2016-17 (annual), 1998-99 Q1 to 2017-18 Q1 (quarterly) – [Table 13.7](#)

## Freight lifted

- Freight lifted, 1982-83 to 2016-17 (annual), 1996-97 Q1 to 2017-18 Q1 (quarterly) – [Table 13.6](#)

## Freight delay minutes per 100 train kilometres

- Normalised freight delay, 2007-08 to 2016-17 (annual), 2007-08 Q1 to 2017-18 Q1 (quarterly) – [Table 13.5](#)

## Freight train kilometres by operator

- Freight train kilometre, 2010-11 to 2016-17 (annual), 2010-11 Q1 to 2017-18 Q1 (quarterly) – [Table 13.25](#)

## Freight market indicators (Q4/annual publications only)

- Number of freight train movements, 2003-04 to 2016-17 – [Table 13.10](#)
- Impact on rail haulage, 2004-05 to 2015-16 – [Table 13.8](#)
- Rail market share, 1998 to 2015 – [Table 13.12](#)

**Revisions:** There have been some minor revisions to the previously published dataset. Further details can be found at: [Revisions Log](#).

**Methodology:** For more information on data collection and the methodology used to calculate the statistics in this release please see the accompanying [Quality Report](#).

# 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;
- 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 Abby Sneade on 020 7282 2022 or contact [rail.stats@orr.gsi.gov.uk](mailto: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](#). They also publish road freight statistics which can be found at [Road freight: domestic and international statistics](#).



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