

Freight Rail Usage and Performance

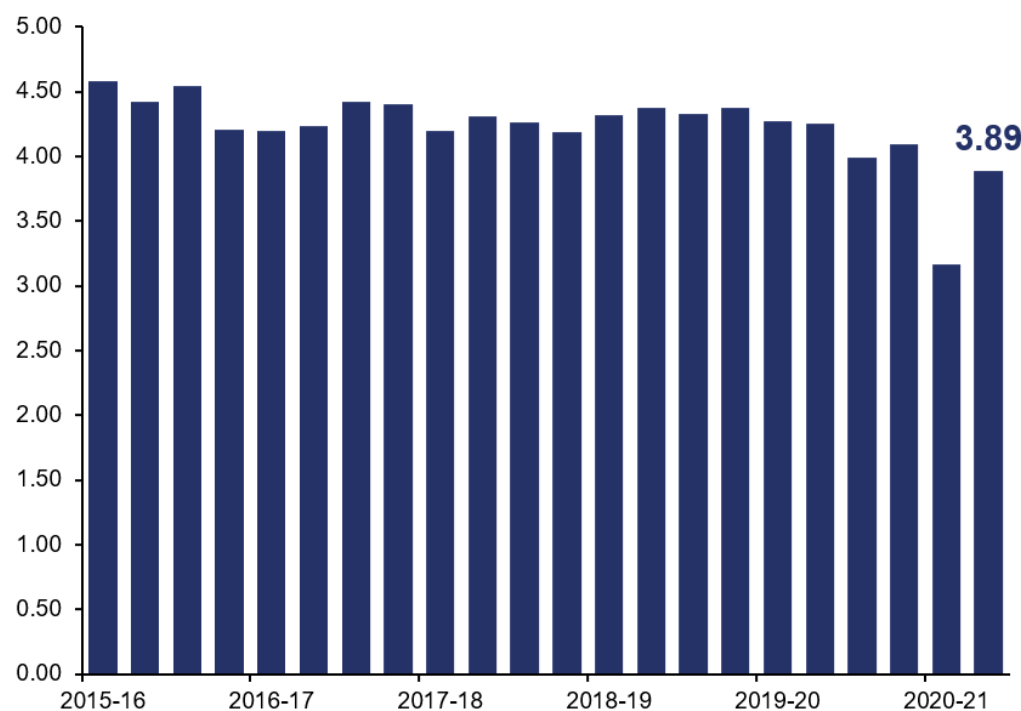
2020-21 Quarter 2

17 December 2020

Freight rail usage and performance during the second quarter of 2020-21 was affected by the coronavirus (Covid-19) pandemic. The lower number of passenger and freight train services in operation led to improvements in performance, whilst freight volumes declined.

Total **freight moved** was 3.89 billion net tonne kilometres in 2020-21 Q2. This is the lowest Q2 total since the time series began in 1998-99.

Freight moved (billion net tonne kilometres), Great Britain, 2015-16 Q1 to 2020-21 Q2



Freight train kilometres dropped by 12% in 2020-21 Q2 compared to the same quarter the previous year, falling to 7.5 million kilometres.

The proportion of freight trains arriving within 15 minutes, as measured by the **Freight Delivery Metric**, reached 95.4%.

All data tables, a quality and methodology report and an interactive dashboard associated with this release are published on the [Freight rail usage and performance](#) page on the ORR data portal. Key definitions are in Annex 1 of this release.

Background:

This quarterly statistical release contains information on rail freight usage and performance in Great Britain.

The statistics cover **freight moved, freight lifted, freight delivery metric (FDM), freight delays per 100 train km and freight train km by operator.**

Sources: Network Rail, Freight Operating Companies.

Latest quarter: 2020-21 Q2 (July to September 2020).

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1. Freight moved

The volume of freight moved was 3.89 billion net tonne kilometres in 2020-21 Q2, which represents the lowest Q2 total since the time series began in 1998-99. This was a 9% reduction on the same quarter last year.

Coal has seen the biggest reduction in freight moved (down 46%) compared to 2019-20 Q2. This fall is consistent with the longer-term trend for coal traffic.

International traffic saw a 30% reduction in freight moved compared to the same quarter last year, whilst oil and petroleum saw a 22% reduction.

In terms of absolute volumes, the construction sector has seen the largest decrease, falling by 0.11 billion net tonne kilometres compared to the same quarter last year. The market share of construction has remained the same at 28%.

Domestic intermodal (transporting of goods to and from GB ports makes up the majority of this category) has the largest share of freight moved (43%). It has decreased by 0.08 billion net tonne kilometres compared to the same quarter last year.

Figure 1.1: Freight moved (billion net tonne kilometres) by commodity, Great Britain, 2020-21 Q2 and change on 2019-20 Q2 (Table 1310)

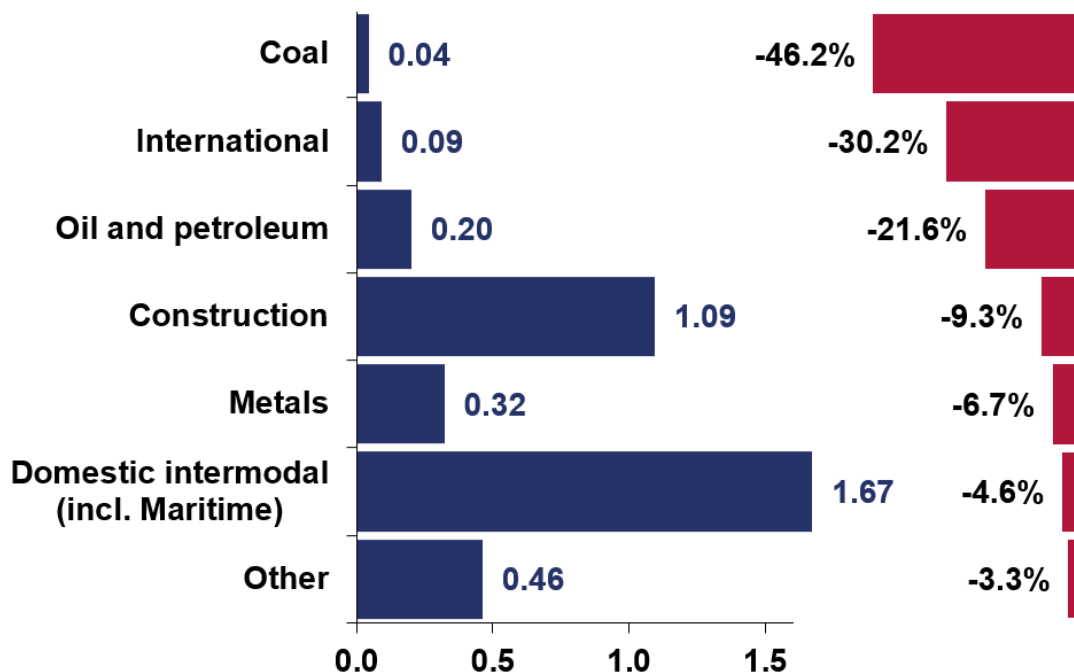
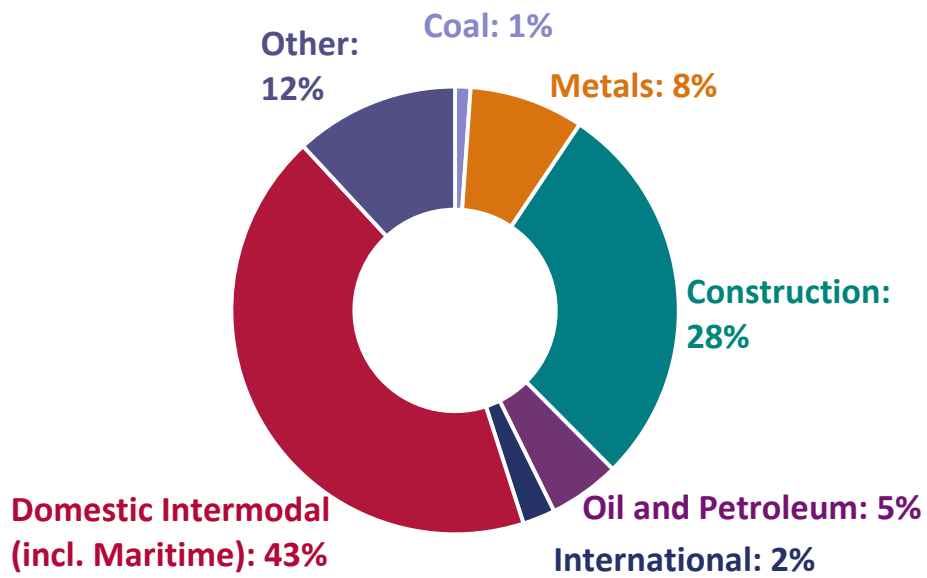


Figure 1.2: Proportion of freight moved by commodity, Great Britain, 2020-21 Q2 (Table 1310)



2. Freight lifted

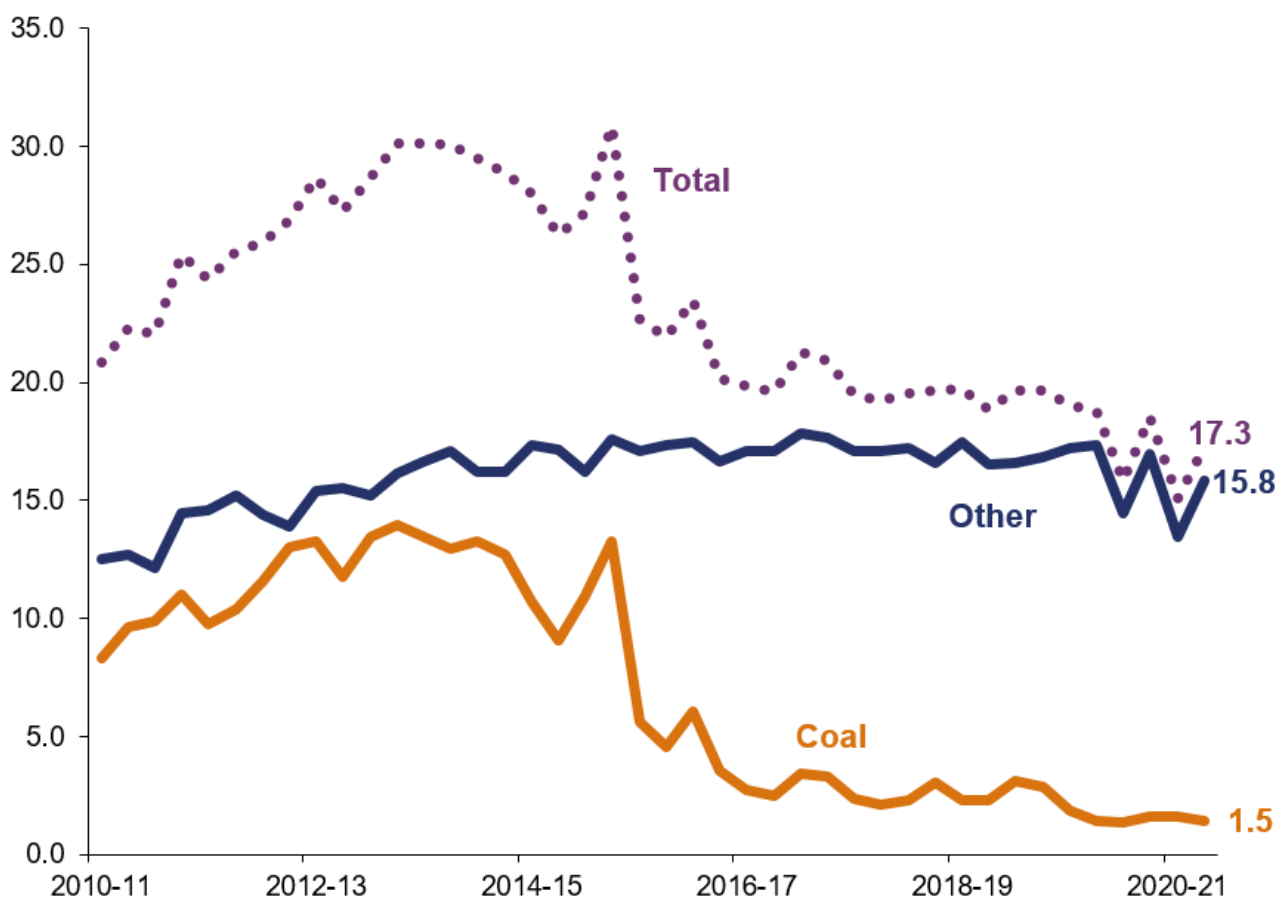
The coverage of the freight lifted data has been improved by incorporating two more Freight Operating Companies up to the latest quarter. Colas Freight have been included from 2010-11 Q1 – estimates are used until 2019-20 Q4 and actual data from 2020-21 Q1. Devon and Cornwall Railways have been included from 2011-12 Q1, with the data based on estimates. See Annex 2 or the [quality and methodology report](#) for more information.

The total amount of freight lifted in 2020-21 Q2 was 17.3 million tonnes, an 8% decrease compared to the same quarter last year.

The amount of coal lifted increased by 3% compared to 2019-20 Q2. Following the significant downturn in coal traffic since the end of 2014-15, the amount of coal lifted has stabilised over the last five quarters at between 1.4 and 1.6 million tonnes per quarter.

Other freight lifted fell by 9% in the past year to 15.8 million tonnes. This was the lowest Q2 total of non-coal freight lifted since 2012-13 Q2.

Figure 2.1: Freight lifted (million tonnes), Great Britain, 2010-11 Q1 to 2020-21 Q2 (Table 1315)



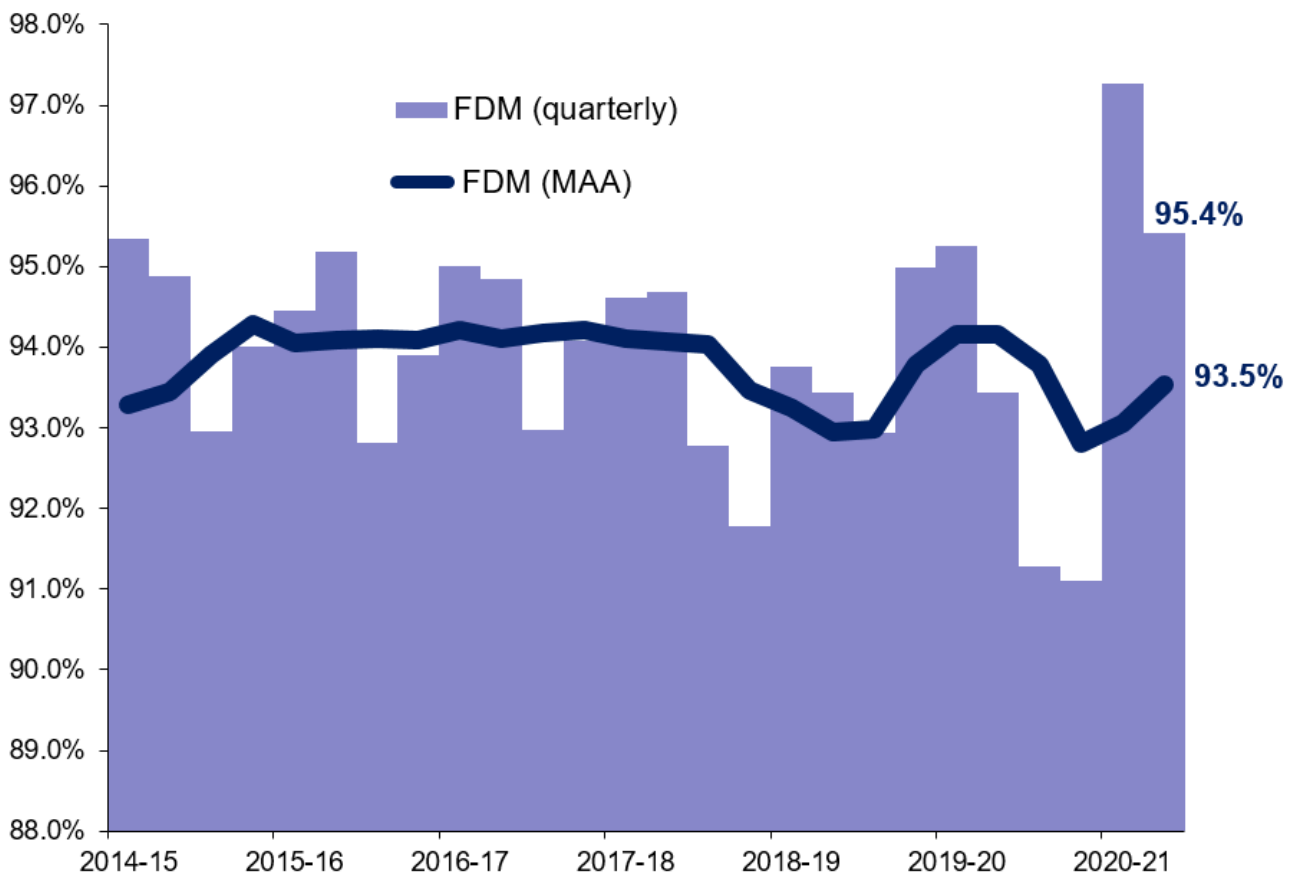
3. Freight Delivery Metric (FDM)

The Freight Delivery Metric was 95.4% in 2020-21 Q2. This was the highest level of Q2 freight punctuality since the start of the time series in 2012-13. With passenger operators running a reduced timetable compared to before the coronavirus pandemic, [freight services were prioritised](#).

The improvement in freight punctuality is not as visible when considering the FDM moving annual average (MAA). This is because performance in 2020-21 Q1 and Q2 was affected by fewer trains running than normal. Whilst freight services were not affected to the same extent as passenger services, there were still fewer freight trains running than in a typical quarter. This is illustrated in section 5 below covering freight train kilometres.

The FDM MAA was 93.5% at the end of 2020-21 Q2, down 0.6 percentage points since the same time last year.

Figure 3.1: Freight Delivery Metric (quarterly and MAA), Great Britain, 2014-15 Q1 to 2020-21 Q2 (Table 1320)

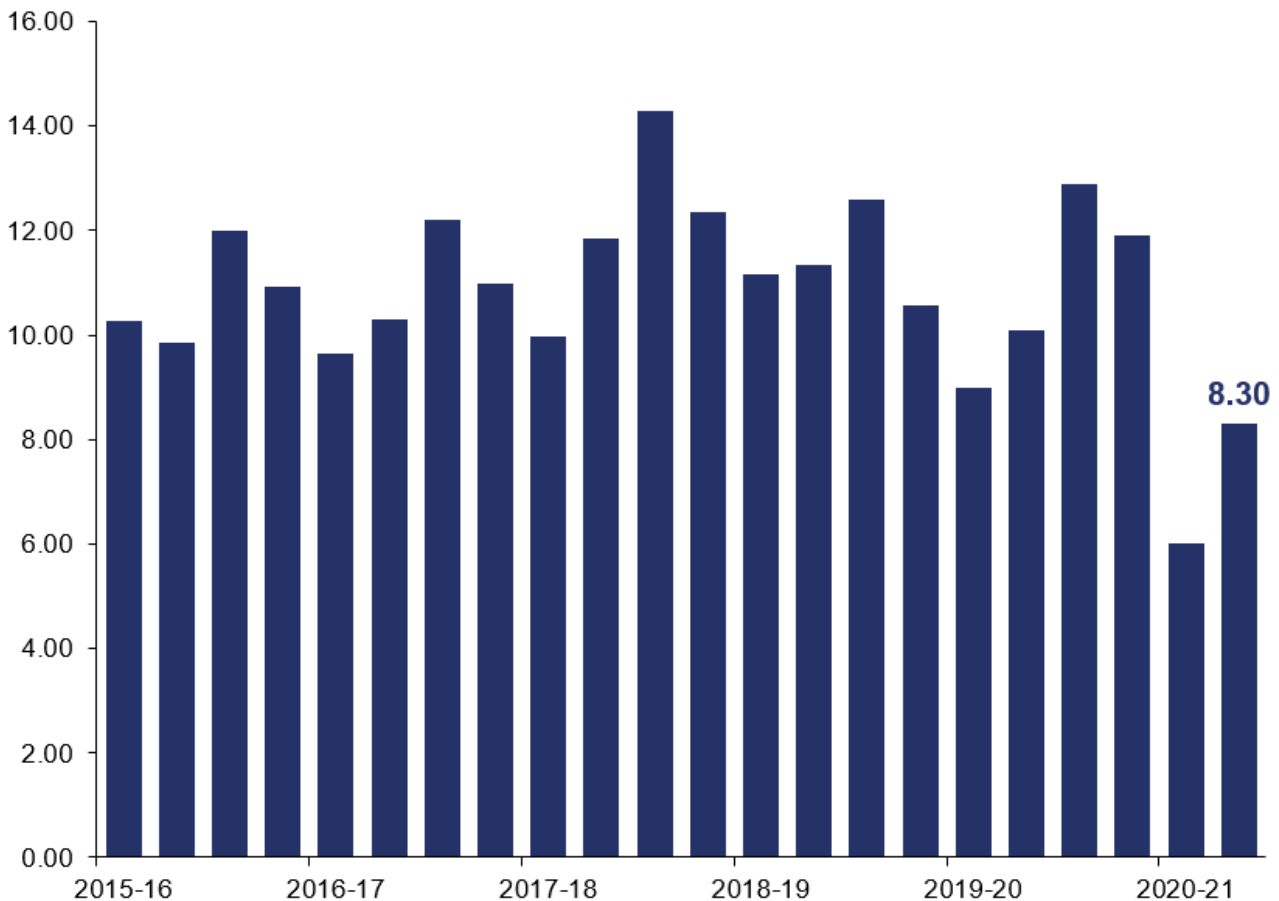


4. Freight delay per 100 train kilometres

Freight operators experienced 8.3 minutes of delay per 100 train kilometres in 2020-21 Q2. This was down 18% on the same quarter last year. It represents the lowest level of Q2 freight delay since the time series began in 2007-08.

The reduction in the number of freight and passenger services operating across the network and the prioritisation of freight services during the pandemic, led to lower freight delays.

Figure 4.1: Freight delays per 100 train kilometres, Great Britain, 2015-16 Q1 to 2020-21 Q2 (Table 1325)

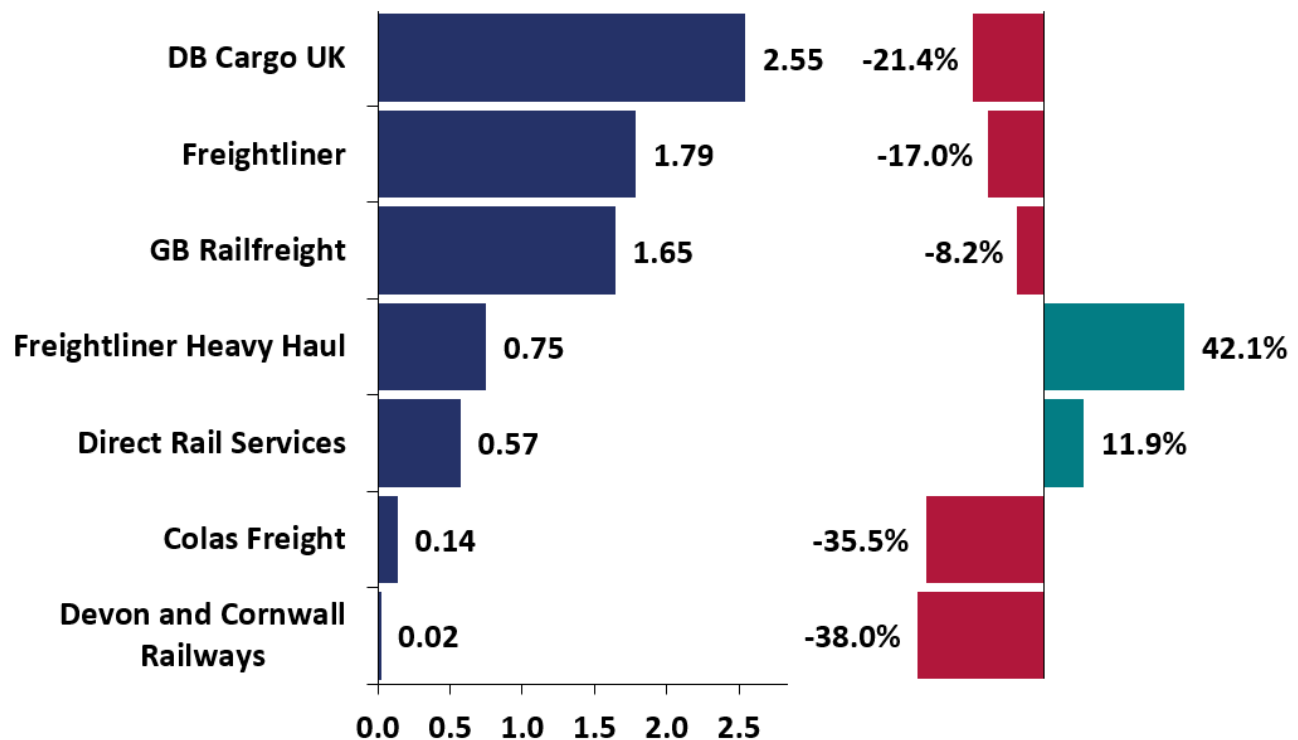


5. Freight train kilometres

Nationally, freight train kilometres fell by 12% compared to 2019-20 Q2. The two largest operators had the greatest absolute reductions. Freight train kilometres for DB Cargo UK decreased by 0.69 million kilometres (down 21%) and for Freightliner decreased by 0.37 million kilometres (down 17%).

These reductions were partially offset by a 42% increase in train kilometres for Freightliner Heavy Haul. This rise can be attributed to their [acquisition of the Mendip contract](#) from DB Cargo UK in November 2019. Since 2019-20 Q2, Freightliner Heavy Haul have increased their market share from 6.2% to 10.1%.

Figure 5.1: Freight train kilometres (millions) by operator, Great Britain, 2020-21 Q2 and change on 2019-20 Q2 (Table 1333)



6. Annexes

Annex 1 – Definitions

- **Freight moved** measures the amount of freight moved on the railway network, taking into account the weight of the load and the distance carried. It is measured in net tonne kilometres.
- **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 Delivery Metric (FDM)** measures the percentage of commercial freight services that arrive at planned destination within 15 minutes of their booked arrival time or with less than 15 minutes of Network Rail or passenger operator delay. *A higher score indicates better performance.*
- **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.
- **Freight delay per 100 train kilometres** is a normalised measure of delay experienced by freight operators. It 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. *A lower score indicates better performance.*
- **Freight train kilometres** is the actual kilometres travelled by freight operators 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.

Further information on each of these measures and other definitions can be found in the [Freight quality and methodology report](#).

Annex 2 – Quality and methodology

Data sources

Most of the data contained within this statistical release is sourced from Network Rail, with the exception of freight lifted data, which is sourced directly from the six largest Freight Operating Companies (DB Cargo UK, Freightliner, GB Railfreight, Direct Rail Services, Colas Freight, and Devon & Cornwall Railways) and provided on a quarterly basis.

To provide more comprehensive coverage of the freight market, estimates of freight lifted have been calculated for Devon & Cornwall Railways (2011-12 Q1 onwards) and Colas Freight (2010-11 Q1 to 2019-20 Q4). From 2020-21 Q1, Colas Freight are providing actual freight lifted data but Devon & Cornwall Railways will continue to be estimated in future releases. These estimates are based on calculating the number of freight train movements in a quarter for each operator (estimated from their actual train mileage data) and multiplying that by the average tonnes lifted per train for the latest full year, at a national level.

Network Rail provides data to ORR within 21 days of the end of each of the 13 railway reporting periods (each period lasts four weeks). The quarterly data in this release sourced from Network Rail are derived by splitting the periodic data according to the number of days of the period that fall within each quarter.

The latest freight train kilometres data and freight delay per 100 train kilometres data should be treated as provisional. Freight operators can provide Network Rail with additional data (e.g. cancellations) and Network Rail may re-attribute delays over time.

Freight moved data is not revised as the data is provided as a periodic snapshot.

Further development of these statistics

Our freight lifted statistics are currently disaggregated between Coal and Other. Following the slowdown in Coal traffic, this split has limited value. We are investigating the possibility of providing a more disaggregated set of commodities in future.

Revisions

There have been revisions to previously published data. Further details on the revisions can be found in the [Revisions log](#).

Further information on data sources, quality, and the methodology used to calculate the data within the release can be found in the [Freight quality and methodology report](#).

Annex 3 – List of data tables associated with this release and other related statistics

Data tables

All data tables can be accessed on the [ORR data portal](#) free of charge in OpenDocument Spreadsheet (.ods) format. We can also provide data in csv format on request.

All tables associated with this release can be found under the Data tables heading at the bottom of the [Freight rail usage and performance](#) page.

Freight usage

- Freight moved (quarterly) – Table 1310
- Freight moved (periodic) – Table 1314
- Freight lifted (quarterly) – Table 1315
- Rail freight impact on road haulage (annual) – Table 1340
- Rail freight market share (annual) – Table 1350

Freight performance

- Freight Delivery Metric (FDM) (quarterly) – Table 1320
- Freight Delivery Metric by Network Rail Region (FDM-R) (quarterly) – Table 1324
- Freight delays per 100 train kilometres (quarterly) – Table 1325

Freight traffic

- Freight trains run (annual) – Table 1330
- Freight train kilometres by operator (quarterly) – Table 1333

Other related statistics

Passenger rail usage statistics are published on the [Passenger rail usage page](#) on the data portal.

Passenger rail performance statistics are published on the [Passenger rail performance page](#) on the data portal.

Estimates of passenger and freight energy consumption and carbon dioxide equivalent (CO₂e) emissions are published on the [Rail emissions page](#) on the data portal.

The Department for Transport (DfT) also publishes some [multimodal freight statistics](#) as part of the [Transport Statistics Great Britain publication](#).

The Department for Transport (DfT) also publishes [rail statistics](#). For example, Rail passenger numbers and overcrowding on weekdays in major cities.

Annex 4 – ORR’s statistical publications

Statistical Releases

This publication is part of ORR’s [National Statistics](#) accredited releases, which consist of seven annual publications: **Estimates of Station Usage; Rail Industry Finance (UK); Rail Fares Index; Rail Safety Statistics; Rail Infrastructure and Assets; Rail Emissions; Regional Rail Usage**; and four quarterly publications: **Passenger Rail Performance; Freight Rail Usage and Performance; Passenger Rail Usage; Passenger Rail Service Complaints**.

In addition, ORR also publishes a number of Official Statistics, which consist of three annual publications: **Train Operating Company Key Statistics; Rail Statistics Compendium; Occupational Health**; and four quarterly publications: **Signals passed at danger (SPADS); Delay Compensation Claims; Disabled Person’s Railcard (DPRC); Passenger assistance**.

All the above publications are available on the [ORR data portal](#) along with a list of [publication dates](#) for the next 12 months.

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**.

The majority of these [statistical releases were assessed in 2012](#) and also hold National Statistics status. Since our assessment we have improved the content, presentation and quality of our statistical releases. In addition, in July 2019 we launched our new data portal. Therefore, in late 2019 we worked with the [Office for Statistics Regulation](#) (OSR) to conduct a compliance check to ensure we are still meeting the standards of the Code. On 4 November 2019, [OSR published a letter](#) confirming that ORR’s statistics should continue to be designated as National Statistics. OSR found many positive aspects in the way that we produce and present our statistics and welcomed the range of improvements made since the statistics were last assessed. [Estimates of Station Usage statistics were assessed in 2020](#).

For more information on how we adhere to the Code please see our [compliance statements](#). For more details or to provide feedback, please contact the Statistics Head of Profession (Lyndsey Melbourne) at rail.stats@orr.gov.uk.



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