Freight Rail Usage and Performance
2020-21 Quarter 1

24 September 2020

Contents:

Freight rail usage and performance during the first 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 3.16 billion net tonne kilometres in 2020-21 Q1, the lowest quarterly total since the time series began in 1998-99.

Freight moved (billion net tonne kilometres), Great Britain, 2015-16 Q1 to 2020-21 Q1
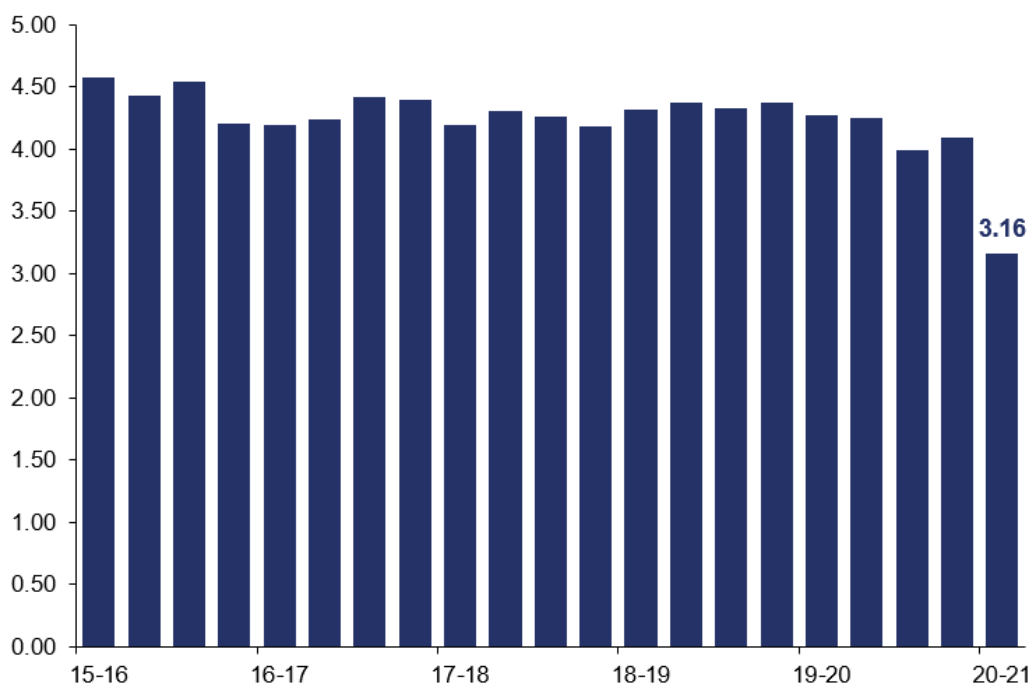
Freight train kilometres dropped by 26% compared to 2019-20 Q1, falling to 6.3 million kilometres.

The proportion of freight trains arriving within 15 minutes, as measured by the **Freight Delivery Metric**, reached an all-time high of 97.3%.

All data tables, a quality and methodology report and an interactive chart 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.

1. Freight moved

The volume of freight moved was 3.16 billion net tonne kilometres in 2020-21 Q1, the lowest quarterly total since the time series began in 1998-99. This was a 26% reduction on the same quarter last year.

Coal has seen the biggest reduction in freight moved compared to 2019-20 Q1 although that fall is consistent with the longer-term trend for coal traffic, rather than a direct consequence of the coronavirus (COVID-19) pandemic.

International traffic saw a 40% reduction in freight moved compared to the same quarter last year, falling to its lowest quarterly level since 2007-08.

In terms of volumes, the construction sector has been hardest hit, falling by 0.5 billion net tonne kilometres compared to the same quarter last year. As a result, market share has fallen from 28% to 24%, representing construction's lowest share since the end of 2016-17.

Domestic intermodal (which includes the transporting of goods to and from UK ports) has the largest share of freight moved (42%), but has also seen a large fall; a reduction of 0.4 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 Q1 and change on 2019-20 Q1 (Table 1310)
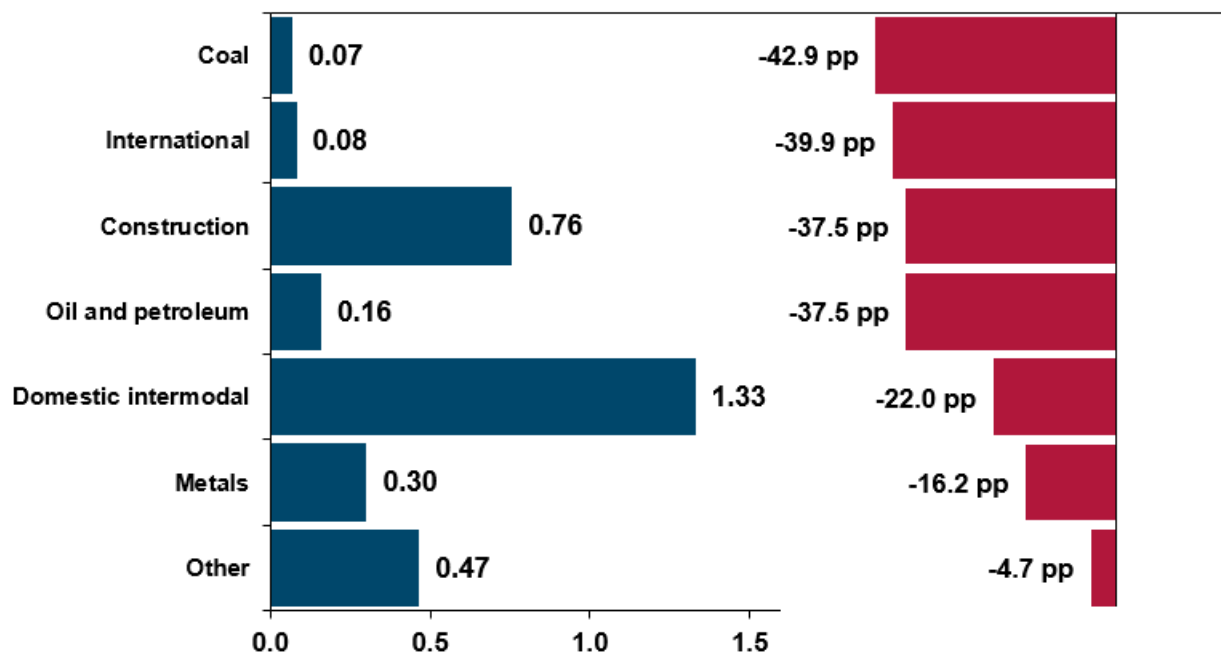
2. Freight lifted

The total amount of freight lifted in 2020-21 Q1 was 14.3 million tonnes, a 22% decrease compared to the same quarter last year.

The amount of coal lifted fell by 13% compared to 2019-20 Q1. Following the significant downturn in coal traffic since the end of 2014-15, the amount of coal lifted has stabilised over the last four quarters at between 1.4 and 1.6 million tonnes per quarter.

Other freight lifted fell by 23% in the past year to 12.7 million tonnes. This represents the lowest level of non-coal freight lifted in any quarter since 2010-11 Q3.

Figure 2.1: Freight lifted (million tonnes), Great Britain, 2010-11 Q1 to 2020-21 Q1 (Table 1315)
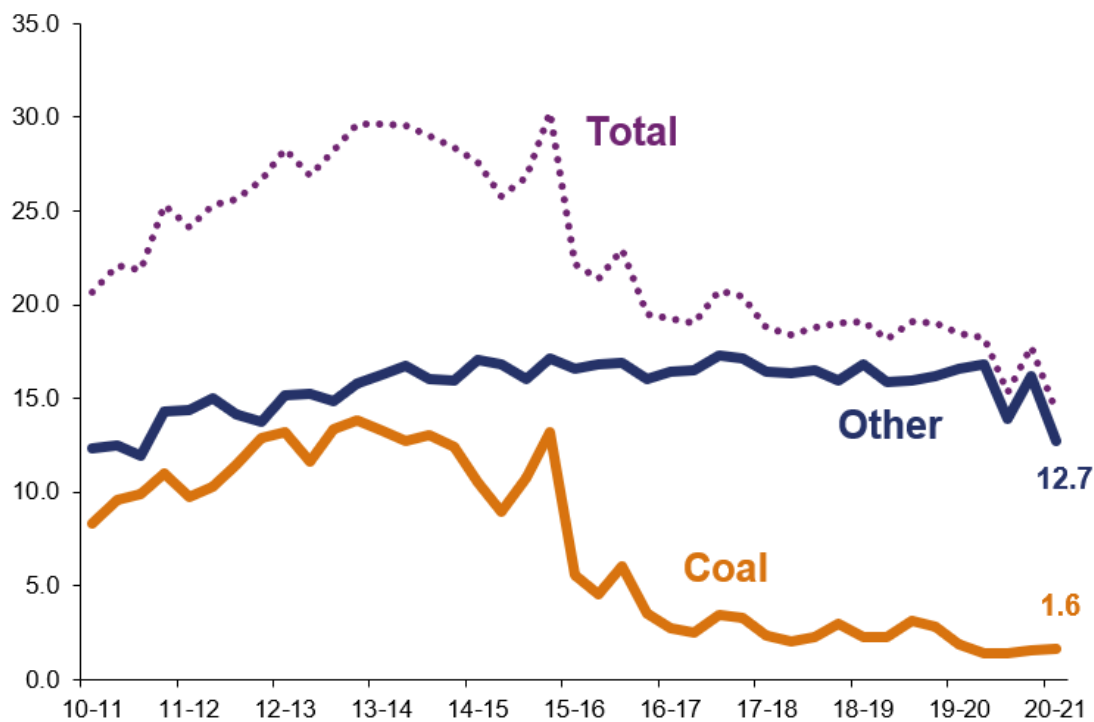
3. Freight Delivery Metric (FDM)

The Freight Delivery Metric was 97.3% in 2020-21 Q1, a record high for freight punctuality and a turnaround from 2019-20 Q4 when FDM recorded its lowest level. With passenger operators running a reduced timetable, at around two-thirds of their normal levels, 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 carries a lower weight in the MAA calculations due to 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 normal quarter. This is illustrated in section 4 below covering freight train kilometres.

The FDM MAA was 93.1% at the end of 2020-21 Q1, down 1.1 percentage points since the same time last year.

Figure 3.1:   Freight Delivery Metric (periodic and MAA), Great Britain, 2014-15 Q1 to 2020-21 Q1 (Table 1320)
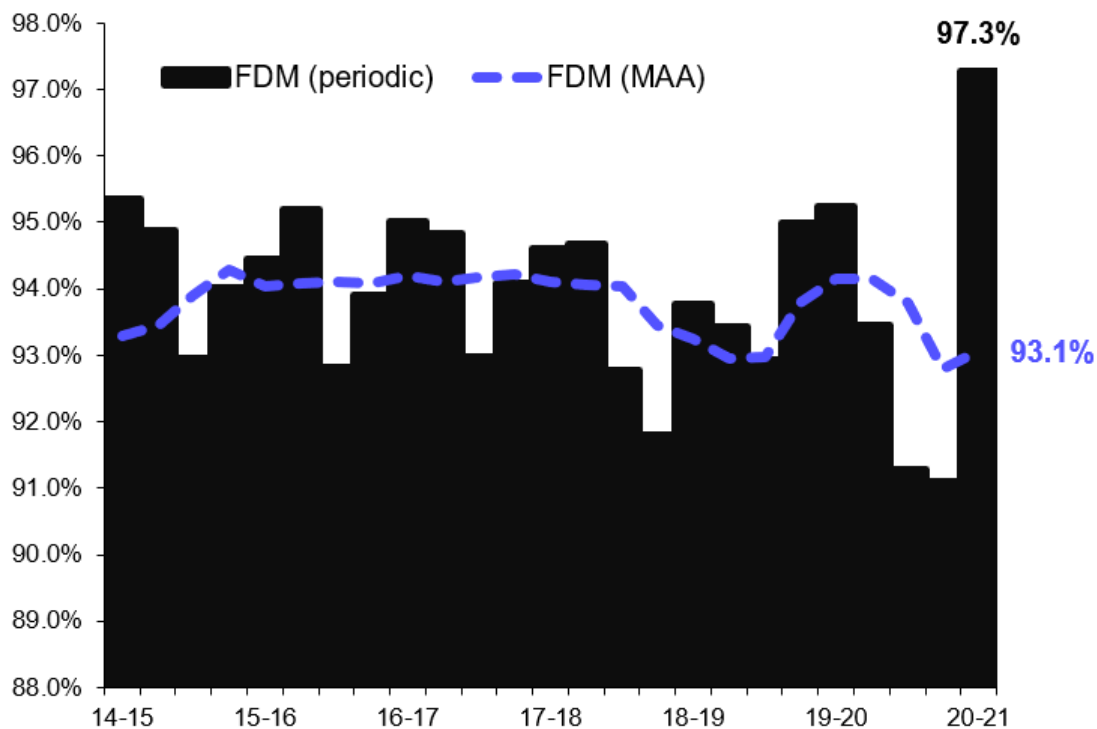
4. Freight delay per 100 train kilometres

Freight operators experienced just over 6 minutes of delay per 100 train kilometres in 2020-21 Q1. This was down almost a third on the same quarter last year and the lowest level of freight delay since the time series began in 2007-08.

Due to the reduction in the number of passenger services operating across the network and the prioritisation of freight services during the coronavirus (COVID-19) pandemic, there was less chance of freight delays.

Figure 4.1:   Freight delays per 100 train kilometres, Great Britain, 2014-15 Q1 to 2020-21 Q1 (Table 1325)
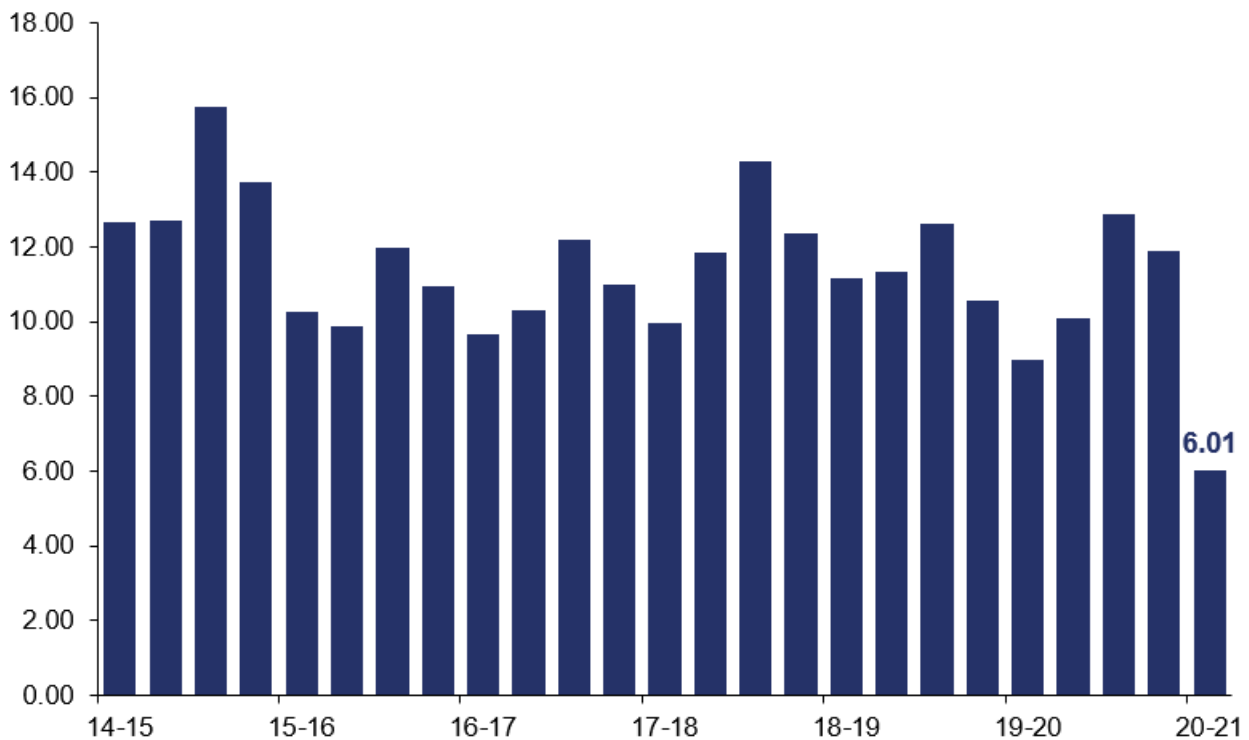
5. Freight train kilometres

Nationally, freight train kilometres fell by 25% compared to 2019-20 Q1. The three largest operators (DB Cargo, Freightliner and GB Railfreight) all had similar falls of between 26.8% and 32.5%.

These reductions were partially offset by a 50% increase in train kilometres for Direct Rail Services. The Tilbury to Grangemouth service was introduced at the end of June last year and the impact of that change is still evident in the comparisons with last year. Over that time frame, Direct Rail Services have also increased their market share from 4.5% to 8.9%.

Figure 5.1: Freight train kilometres (millions) by operator, Great Britain, 2020-21 Q1 and change on 2019-20 Q1 (Table 1333)
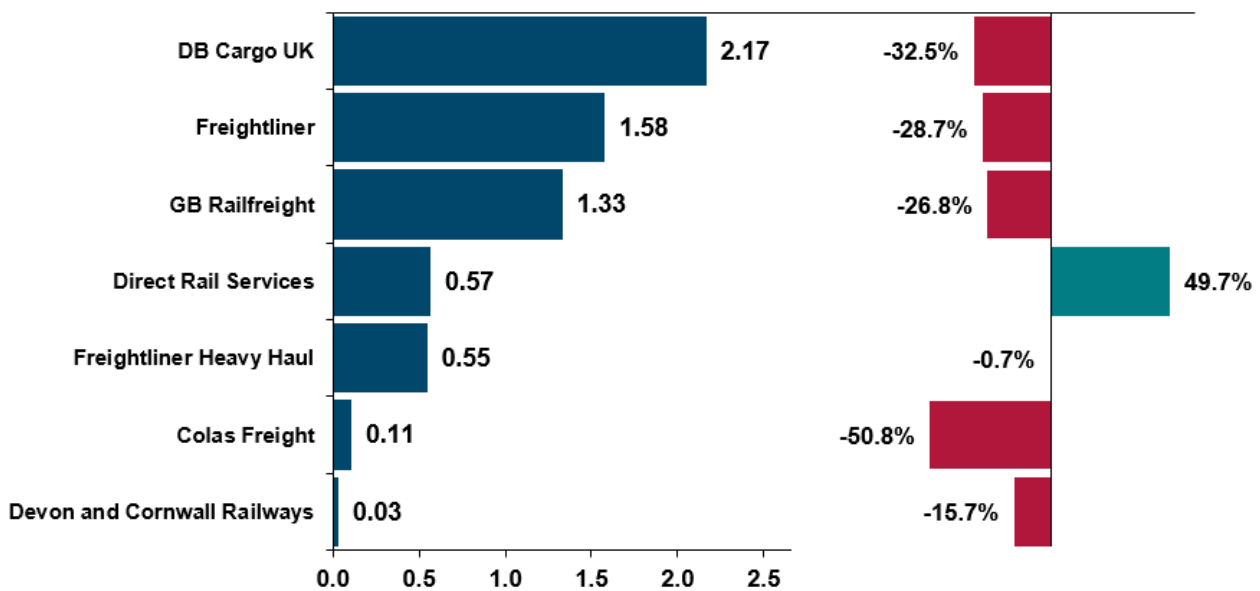
6. Annexes

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 (e.g. commodities) can be found in the [Freight quality and methodology report](#).

Annex 2 – Quality and methodology

Data source

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 four largest Freight Operating Companies (DB Cargo UK, Freightliner, GB Railfreight and Direct Rail Services) and provided on a quarterly basis.

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

We currently collect freight lifted data from the four operators with the largest market share. Based on their freight moved traffic, they account for approximately 95% of the market. To improve coverage, we have contacted other freight operators to establish whether they can provide quarterly freight lifted data to us for inclusion in this release. In the absence of any actual data from the remaining freight operators, we will estimate their freight lifted data in future publications.

Our freight lifted statistics are currently disaggregated between Coal and Other. Following the slowdown in Coal traffic, this split is no longer useful. We are investigating the possibility of providing a more disaggregated set of commodities in future.

Further details on railway reporting periods, data collection and the methodology used to calculate the data within the release can be found in the Freight quality and methodology report.

Revisions

Freight lifted (Table 1315) data for 2019-20 Q4 have been revised due to an error in the calculation of the previously published Q4 figures. Freight delay per 100 train kilometres (Table 1325) data have been revised for 2018-19 and 2019-20. This was due to refreshed delay data from Network Rail.

Further details on revisions can be found in the Revisions log.

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

Freight performance

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

Freight traffic

- Freight trains run – Table 1330
- Freight train kilometres by operator – Table 1333

Other related statistics

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

Annex 4 – ORR's statistical publications

Statistical Releases

This publication is part of ORR's National Statistics accredited releases, which consist of six annual publications: **Rail Finance; 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 four annual publications: **Estimates of Station Usage; 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**.

Our statistical releases were assessed in 2012 and 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 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.

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.