This article focuses on recent rail freight transport statistics in the European Union (EU). The total performance in the EU-28 can be estimated at around 430 billion tonne-kilometres in 2018.

Positive trend for EU-28 transport performance since 2013

The evolution of the EU-28 rail freight transport performance between 2006 and 2018 is presented in Figure 1. The EU-28 rail freight transport peaked at 438 billion tonne-kilometres in 2007 after an increase of 4.4% compared with 2006. A sharp decrease was observed between 2008 and 2009 (-17.4%), down to 353 billion tonne-kilometres, as result of the economic crisis. A recovery immediately followed with steady increases in 2010 and 2011 (+8.0% and +7.2%). After a decline in 2012 (-3.9%), rail freight transport performance rebounded in 2013 (+1.3%) and remained relatively stable between 2014 and 2016 (+0.4%). Eventually, noticeable increases of rail freight transport performance have been registered in 2017 and 2018 (+3.2% and +3.4%), reaching a post economic crisis peak at 430 million tonne-kilometres.

Figure 1: Rail freight transport for main undertakings, EU-28, 2006-2018 (billion tonne-kilometres) Source: Eurostat (rail_go_typepas) and (rail_go_quartal)

The evolution of the EU-28 rail freight transport performance at quarterly level is presented in Figure 2. At quarterly level, the movements were more erratic. No seasonal pattern can be identified according to the trend.
observed. Post economic crisis, a first peak of activity was reached in the 2nd quarter of 2011 with 104 billion tonne-kilometres. Since this period, the transport performance never went below 94 billion tonnes (lowest point reached in the 1st quarter of 2013). In 2018, all quarters showed higher levels compared to the 2nd quarter of 2011. A new peak has been reached in the 4th quarter of 2018 with 109 billion tonne-kilometres. Focusing on 2018, transport performance increased in all quarters compared to the same quarters of the previous year (+2.2 % in the 1st quarter, +4.0 % in the 2nd quarter, +4.2 % in the 3rd quarter, +5.2 % in the 4th quarter).

Figure 2: Rail freight transport for main undertakings, EU-28, 2010Q1-2018Q4 (billion tonne-kilometres) Source: Eurostat (rail_go_quartal)

Year-to-year development differs significantly at national level

The change in transport performance between 2017 and 2018 is presented for each reporting country in Figure 3. A growth in transport performance between 2017 and 2018 was registered for 16 EU Member States, the two EFTA countries Switzerland and Norway, and the candidate country North Macedonia. In absolute terms, Hungary recorded the largest decrease between 2017 and 2018 (-2.8 billion tonne-kilometres), followed by France (-1.4 billion tonne-kilometres) and Romania (-0.8 billion tonne-kilometres). By contrast, five countries reported absolute increases of more than 1 billion tonne-kilometres over the same period, namely Germany (+5.1 billion tonne-kilometres), Poland (+4.5 billion tonne-kilometres), Latvia (+2.8 billion tonne-kilometres), Sweden (+2.0 billion tonne-kilometres) and Lithuania (+1.5 billion tonne-kilometres).

Figure 3: Rail transport for main undertakings: change between 2017 and 2018 (million tonne-kilometres) Source: Eurostat (rail_go_typepas) and (rail_go_quartal)
In percentage terms, the highest increase between 2017 and 2018 in total rail freight transport performance among the EU Member States was recorded by Latvia (+18.9 %), followed by Greece (+14.1 %), Bulgaria (+13.1 %) and Estonia (+11.3 %). At the other end of the scale, the largest decrease between 2017 and 2018 was registered in Hungary (-20.8 %) followed by Ireland (-11.8 %). A substantial fall was also observed for Montenegro (-33.2 %).

The change in tonnes of freight transported between 2017 and 2018 is presented for each reporting country in Figure 4. The picture is slightly different compared with transport performance in tonne-kilometres. Indeed, 14 EU Member States, along with Switzerland, Norway, North Macedonia and Turkey, registered an increase between 2017 and 2018, while a drop was observed for 10 EU Member States and Montenegro. In absolute terms, France recorded the largest decrease between 2017 and 2018 (-7.0 billion tonnes), followed by Austria (-2.3 billion tonnes) and Romania (-1.1 billion tonnes). By contrast, Poland reported an increase of 8.1 million tonnes and four countries reported absolute increases of more than 4 billion tonnes over the same period, namely Germany (+5.9 billion tonnes), Latvia (+5.5 billion tonnes), Sweden (+4.9 billion tonnes) and Lithuania (+4.1 billion tonnes).

![Image: Rail transport for main undertakings: change between 2017 and 2018 (thousand tonnes)](source: Eurostat (rail_go_typepas) and (rail_go_quartal))

In percentage, the highest increase between 2017 and 2018 in total rail freight transport among the EU Member States was recorded by Bulgaria (+28.8 %), followed by Latvia (+12.5 %). At the other end of the scale, the largest decrease between 2017 and 2018 was registered in France (-7.7 %). A substantial fall was also observed for Montenegro (-39.7 %).

**Geographical location plays a key role in the share of international transport**

Rail freight transport performance by type of transport (national, international loadings/unloadings and transit) in total tonne-kilometres performed is shown in Figure 5 and Table 1. The share of international transport in the various countries is strongly linked to their geographical position within Europe. For the EU-28 as a whole, the share of international loadings could be estimated at almost 16 % in 2018, international unloadings at 23 %, transit at 10 % and national at 51 %. In this context, transit transport performance for EU-28 is calculated as the sum of the transit transport performance reported by each Member State.

The Member States registering the highest share of international transport are located in key corridors within the European market. In the Baltic States of Latvia and Estonia, situated at the border between the EU and Russia, international unloadings accounted for 85 % and 68 % of the total transport performance in 2018, respectively. The Netherlands, strategically situated in the heart of the European market, registered a share of international loadings of 58 % in total tonne-kilometres performed. The key import port of Rotterdam, with large sea/rail transfers of goods dispatched within the European Union, strongly influences these figures.
Greece registered the highest share of international transport on total transport performance in 2018, with 97%.

By contrast, countries with specific geographical characteristics (at the periphery of the European Union or islands) recorded a low share of international transport by rail. No international transport has been recorded for Ireland in 2018. Small shares are observed for the United Kingdom (3%) and Denmark (11%). For such countries, the preferred mode for international freight transport remains maritime transport, goods being delivered at the nearest port to the point of their destination and then being forwarded in the country mainly by road, but also by rail (accounted as national transport). Turkey also recorded a low percentage (4%) which may also be linked to its peripheral position.

![Rail freight transport by type of transport for main undertakings, 2018 (%, based on tonne-kilometres)](image)

*Source: Eurostat (rail_go_typepas)*

Regarding transit transport, Denmark registered the highest share in 2018, with 83%, followed by Switzerland (65%) and North Macedonia (59%). By contrast, eight EU Member States and Norway did not report any transit transport.

When looking at national transport, the highest shares in 2018 were observed in Ireland (100%), the United Kingdom (97%), Spain (84%), Portugal (79%), Bulgaria (75%), Romania (74%) and Poland (70%). National transport represented 95% in Turkey in 2018. By contrast, national transport represented only 2% in Latvia, 3% in Greece, 6% in Denmark, 7% in the Netherlands and 8% in Luxembourg. In North Macedonia, national transport was less than 1% in 2018.

The largest increases in national transport performance among the EU Member States were observed in the Netherlands (+20.0%), Bulgaria (+17.3%), Germany (+11.2%), and Sweden (+10.3%). On the contrary, substantial decreases were registered in Greece (-79.1%), Latvia (-17.2%) and Ireland (-11.8%). Substantial falls were also registered in Montenegro (-58.8%) and North Macedonia (-35.6%).

For total international transport performance the highest increase was in Greece (+32.4%) followed by Latvia (+17.9%), Estonia (+17.7%), Croatia (+13.4%) and Lithuania (+12.2%). Substantial growth was also registered in Turkey (+37.5%), North Macedonia (+20.1%) and Montenegro (+10.6%). By contrast, Hungary registered the largest decrease (-9.4%), followed by Romania (-6.7%), France (-6.4%) and Spain (-6.1%).

Regarding transit transport, the highest rise was observed in Latvia (+44.3%), Sweden (+36.9%) and the Netherlands (+27.9%) while the largest decrease was registered by Greece and Portugal (no transit reported in 2018 in both countries), followed by Hungary (-40.9%). Substantial growth was also registered in Turkey (+101.3%) and a large decrease in Montenegro (-54.9%).
Table 1: Rail freight transport by type of transport for main undertakings, 2017-2018 (million tonne-kilometres)Source: Eurostat (rail_go_typeall), (rail_go_typepas)

Rail freight transport by type of transport (national, international loadings/unloadings and transit) in tonnes are shown in Figure 6 and Table 2. The picture for tonnes is quite similar to tonne-kilometres. In 2018, 99 % of goods in tonnes concerned national transport in the United Kingdom but only 3 % in Greece and in Latvia. The Netherlands registered a share of 59 % of international loadings. By contrast, Ireland does not have international loadings and the United Kingdom had less than 1 % of international loadings in 2018. The registered shares of international unloadings in 2018 are the highest in Latvia (82 %), among all countries, while Ireland does not have international unloadings. In 2018, transit represented 74 % of goods transported by rail in Denmark.

Figure 6: Rail freight transport by type of transport for main undertakings, 2018 (% based on tonnes)Source: Eurostat (rail_go_typepas)

At national level, the biggest increase between 2017 and 2018 was registered in Bulgaria (+39.0 %). By contrast, the highest decrease was observed in Greece (-80.3 %). When looking at international transport, Croatia registered the highest increase (+26.9 %), while France (-8.3 %) observed the largest decrease.
Table 2: Rail freight transport by type of transport for main undertakings, 2017-2018 (thousand tonnes)

Source: Eurostat (rail_go_typeall), (rail_go_typepas)

Source data for tables and graphs

- Rail freight transport statistics: tables and figures

Data sources

The figures presented in this article have been extracted from the Eurostat rail transport database. They include data on national, international and transit transport of the Member States, EFTA and Candidate countries, collected according to the Regulation (EU) No 2018/643 recast of Regulation (EU) No 2016/2032. There is no railway in Cyprus and Malta. The various elements present data collected under the detailed reporting system, meaning that data include only main undertakings which are defined as follows:

- Until 2015: undertakings with a total transport performance greater than 500 million tonne-km or 200 million passenger-km.

- From 2016: undertakings with a total volume of goods transport of at least 200 million tonne-km or a total volume of passengers transport of at least 100 million passenger-km.

Railway undertakings which are below the thresholds may be included for some countries. Basic results and derived indicators (such as growth rates and shares in % of total) in the tables are rounded. However, the figures are based on the non-rounded original data. As a result, the sum of shares in % of total, as shown in the tables, is not necessarily equal to 100 %. Explanatory notes for countries are available in the metadata on the Eurostat website.

Symbols

| : | not available |
| - | not applicable |
| 0 | actual zero or very negligible transport |
| c | confidential data |

Context

The content of this statistical article is based on data collected within the framework of Regulation (EU) No 2018/643 recast of Regulation (EU) No 2016/2032.
Other articles

- All articles on transport
- Transport statistics at regional level

Tables

- Transport, see:

  Railway transport (t_rail)
  Goods transport by rail (ttr00006)

Database

- Transport, see:

  Railway transport (rail)
  Railway transport measurement - Goods (rail_go)
  Historical data (1982-2002) (rail_go_h)

Dedicated section

- Transport

Publications


Methodology

- Reference manual on rail transport statistics

Legislation