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 416 billion tonne-kilometres in 2017.

Positive trend of the EU-28 transport performance since 2013

The evolution of the EU-28 rail freight transport performance between 2006 and 2017 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 a result of the economic crisis. A recovery immediately followed with steady increases in 2010 and 2011 (+8.0% and +7.3%). After a decline in 2012 (-3.8%), rail freight transport performance rebounded in 2013 (+1.3%) and remained relatively stable between 2014 and 2016 (+0.4%). Eventually, a noticeable increase of rail freight transport performance has been registered in 2017 (+3.2%), reaching a post economic crisis peak at 416 million tonne-kilometres.

![Figure 1: Rail freight transport for main undertakings, EU-28, 2006-2017 (billion tonne-kilometres)](source)

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 peak of activity was reached in the 2nd quarter of 2011 with 104 billion tonne-kilometres.
tonne-kilometres. Since this period, the transport performance never went below 93 billion tonnes (lowest point reached in 1st quarter 2013). Focusing on 2017, transport performance substantially increased in all quarters compared to the same quarters of previous year (+7.1 % in the 1st quarter, +3.1 % in the 2nd quarter, +3.6 % in the 3rd quarter, +1.1 % in the 4th quarter).

The change in transport performance between 2016 and 2017 is presented for each reporting country in Figure 3. A growth in transport performance between 2016 and 2017 was registered for seventeen EU Member States, the EFTA country Norway, and the candidate countries Montenegro, the former Yugoslav Republic of Macedonia and Turkey. In absolute terms, Germany recorded the largest decrease between 2016 and 2017 (-3.9 billion tonne-kilometres), followed by Latvia (-0.9 billion tonne-kilometres) and Italy (-0.3 billion tonne-kilometres). In contrast, four countries reported absolute increases of more than 1 billion tonne-kilometres over the same period, namely Poland (+6.2 billion tonne-kilometres), Hungary (+2.8 billion tonne-kilometres), Lithuania (+1.6 billion tonne-kilometres) and Romania (+1.5 billion tonne-kilometres).

Figure 3: Rail transport for main undertakings _change between 2016 and 2017 (million tonne-kilometres) Source: Eurostat (rail_go_typepas) and (rail_go_quartal)

The change in tonnes of freight transported between 2016 and 2017 is presented for each reporting country in Figure 4. The picture is slightly different compared with transport performance in tonne-kilometres. Indeed,
sixteen EU Member States, along with Norway, Montenegro, the former Yugoslav Republic of Macedonia and Turkey, registered an increase between 2016 and 2017, while a drop was observed for eight EU Member States and Switzerland. In absolute terms, Germany recorded the largest decrease between 2016 and 2017 (-15.0 billion tonnes), followed by Latvia (-4.0 billion tonnes) and the United Kingdom (-2.2 billion tonnes). In contrast, Poland reported an increase of 33.4 million tonnes and three countries reported absolute increases of more than 4 billion tonnes over the same period, namely Romania (+8.2 billion tonnes), Lithuania (+5.0 billion tonnes) and Austria (+4.7 billion tonnes).

Figure 3: Rail transport for main undertakings_change between 2016 and 2017 (thousand tonnes)
Source: Eurostat (rail_go_typepas) and (rail_go_quartal)

In percentage, the highest increase between 2016 and 2017 in total rail freight transport performance among the EU Member States was recorded by Greece (+41.1 %), followed by Hungary (+26.9 %), Poland (+13.1 %) and Romania and Slovenia (both +12.2 %). Substantial growths were also observed for Montenegro (+50.2 %), the former Yugoslav Republic of Macedonia (+24.6 %), Norway (+22.0 %) and Turkey (+11.0 %). At the other end of the scale, the largest decrease between 2016 and 2017 was registered in Latvia (-5.4 %) followed by Germany (-3.4 %), with a large decrease also observed in Switzerland (-7.8 %)

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 2017, international unloadings at 22 %, transit at 12 % and national at 50 %.

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 86 % and 62 % of the total transport performance in 2017, respectively. The Netherlands, strategically situated in the heart of the European market, registered a share of international loadings of 61 % in total tonne-kilometres performed. The key import port of Rotterdam, with large sea/rail transfers of goods dispatched within the European Union, strongly influence these figures. 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. 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 (3 %) which may also be linked to its peripheral position.
Regarding transit transport, Denmark registered the highest share in 2017, with 83 %, followed by Switzerland (63 %) and the former Yugoslav Republic of Macedonia (62 %). In contrast, six EU Member States and Norway did not report any transit transport.

When looking at national transport, the highest shares were observed in 2017 for the United Kingdom (97 %), Spain (81 %), Portugal (79 %), Romania (73 %), Bulgaria (72 %) and Poland (70 %). In contrast, national transport represented only 1 % in the former Yugoslav Republic of Macedonia, 3 % in Latvia, 6 % in Denmark, 7 % in the Netherlands and 9 % in Luxembourg.

The largest increases in national transport performance among the EU member States were observed for Hungary (+26.1 %), Estonia (+17.1 %), Greece (+16.9 %), Poland (+13.0 %) and Bulgaria (+12.2 %). Substantial growth was also registered in Montenegro (+96.1 %), Norway (+23.2 %) and Turkey (+11.7 %). On the contrary, substantial decreases were registered in Luxembourg (-13.7 %), Denmark (-12.0 %) and the former Yugoslav Republic of Macedonia (-11.3 %).

For total international transport performance the highest increase was for Greece (+46.8 %) followed by Norway (+19.3 %), Bulgaria (+15.9 %), Finland (+14.9 %) and Romania (+14.1 %). In contrast, Denmark registered the largest decrease (-10.8 %), followed by Latvia (-9.9 %) and Turkey (-8.8 %).

Regarding transit transport, the highest rise was observed for Latvia (+111.6 %) and Romania (+105.3 %) while the largest decrease was registered by Spain (no transit reported in 2017), followed by Bulgaria (-35.7 %).
Table 1: Rail freight transport by type of transport for main undertakings, 2016-2017 (million tonne-kilometres)

<table>
<thead>
<tr>
<th>Country</th>
<th>National Loadings</th>
<th>National Unloadings</th>
<th>International Loadings</th>
<th>International Unloadings</th>
<th>Transit</th>
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<td>13.5</td>
<td>2.3</td>
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<tr>
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<td>15.9</td>
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<td>3.0</td>
<td>11.2</td>
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<td>-0.3</td>
<td>19.8</td>
</tr>
<tr>
<td>Norway</td>
<td>11.2</td>
<td>1.5</td>
<td>6.7</td>
<td>2.1</td>
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<td>10.3</td>
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<td>9.1</td>
<td>2.3</td>
<td>-0.2</td>
<td>14.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>22.1</td>
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<td>12.8</td>
<td>2.5</td>
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<tr>
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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 2017, 99% of goods in tonnes concerned national transport in the United Kingdom but only 4% in Latvia. The Netherlands registered a share of 61% of international loadings. By contrast, Finland has only 1% of international loadings in 2017. The registered shares of international unloadings in 2017 are highest in Latvia (84%), among all countries, while Ireland does not have international unloadings. In 2017, transit represented 74% of goods transported by rail transport in Denmark.

Figure 6: Rail freight transport by type of transport for main undertakings, 2017 (% on total tonnes)

At national level, the biggest increase between 2016 and 2017 was registered in Greece (+39.2%). In contrast, the highest decrease was observed in Luxembourg (-30.7%). When looking at international transport, Romania registered the highest increase (+24.3%), followed by Poland (+23.1%), while Latvia (+13.5%) observed the largest decrease, along with Montenegro (-22.8%).
Rail freight transport by type of transport for main undertakings, 2016-2017 (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 at least 500 million tonnes 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

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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 (tttr00006)

Database

- Transport, see:

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

Dedicated section

- Transport

Publications


Methodology

- Illustrated glossary for transport statistics - 4th edition
- Reference manual on rail transport statistics

Legislation