

2017

Competition figures



Dear readers,

The strong economic growth in 2017 gave transport markets in Germany and Europe a successful year, with excellent performance in passenger and freight sectors alike. Rail was the fastest-growing mode of passenger transport in Germany. Rising passenger numbers in regional, local and long distance transport led to substantial growth in transport volume. In the freight market, meanwhile, only road haulage was able to capitalise on rising demand. Among rail freight companies, the volume sold remained at the previous

year's level. For DB's rail network, the result of these trends was a slight 0.5% increase in operating performance. The numerous competitors, who are now well established in the market, once again accounted for a considerable share of this.

Forecasts anticipate a further increase in traffic over the coming years. To accommodate this growth while making a substantial contribution to saving the environment and protecting the climate, DB is investing heavily in a modernised and digitalised rail network. Combined with the rail pact that we are working toward with the Federal Government, this will create a positive competitive environment for the railways so that they can help tackle the transport volumes of tomorrow with high-capacity, energy-efficient, high-quality services.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Pöhlitz', written in a cursive style.



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German market in 2017

Rising employment and higher disposable incomes bolstered demand for passenger transport in Germany. However, the various modes of transport grew at different rates.

- **Growth continued:** Transport volume in the German passenger transport market rose by 1.0% in 2017. Rising fuel prices and inflation acted as a brake on this upward trend.
- **Rail grew fastest:** With a 1.7% rise in transport volume, rail was the fastest-growing mode of transport. Private motorised transport was up 1.0%, while public road transport stagnated. Air travel declined by 0.4%.
- **Road with highest market share:** Private motorised transport increased its share of the modal split by 0.1 percentage points to 84.4%. Public road

transport declined by 0.1 percentage points to 6.3%. The shares of rail (8.4%) and air travel (0.9%) in the modal split were unchanged.

Transport volume in Germany (in billion passenger kilometres)	2016	2017
Motorised private transport	965.5	975.2
Rail passenger transport	95.9	97.5
Public road transport	72.9	72.9
Air travel (domestic in Germany)	10.4	10.4
Total	1144.7	1156.0

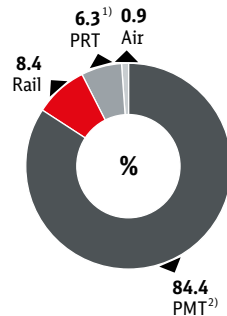
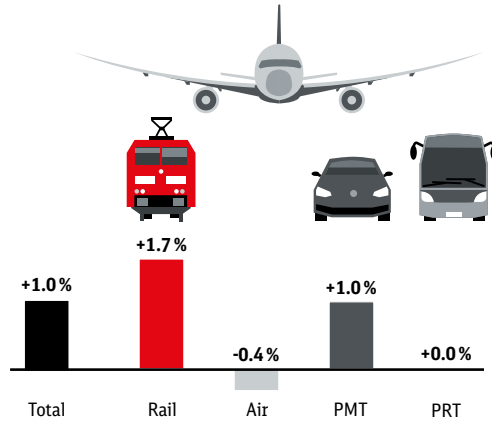
Passenger transport

Long-distance bus travel in decline: For the first time since markets were liberalised, the number of long-distance bus users fell in 2017 by 0.8% to 22.8 million. The transport volume declined by 4.8%.

FlixBus still market leader: Deutsche Touring became insolvent in 2017 and FlixBus took over the Hellö long-distance bus subsidiary of Austrian Federal Railways. Hellö entered the German market in 2016. FlixBus has a market share of over 90%.

Ongoing trend: The transport volume is expected to rise by a further 1.2% in 2018, but this rise is expected to slow down somewhat from 2019 onwards. For rail transport, the Federal Ministry of Transport and Digital Infrastructure forecasts further above-average growth, especially in long-distance transport.

Market development in passenger transport growth year on year and modal split in 2017 (based on transport volume)



¹⁾ Public road transport

²⁾ Private motorised transport



Long-distance rail in Germany in 2017

■ Long-distance trains competing successfully:

In 2017, non-subsidised long-distance passenger rail transport performed well in the intense competition with other transport modes. Supply and demand for rail travel are both rising.

■ New competition on the rail network:

In the long-distance market, Locomore has launched a new connection between Stuttgart and Berlin. Following Locomore's insolvency, the business was taken over by the rail company Leo Express. Tickets are sold by FlixTrain. In addition, FlixTrain has been offering services on the Cologne–Hamburg route since March 2018. BahnTouristikExpress (BTE) is responsible for operations.

■ Success through digitalisation:

With FlixTrain, FlixMobility is

expanding its long-distance transport offering from road (FlixBus) to rail. The company sees the digitalisation of traditional modes of transport as the key to success. Services are operated by other companies with which FlixMobility has signed cooperation agreements.

■ Higher passenger numbers increased capacity utilisation at DB Long Distance:

DB's ICE, IC and EC trains carried 142.2 million passengers in 2017, up 2.3%. The trains' average passenger load factor rose to 55.5% (2016: 52.9%). Transport volume at DB Long Distance increased by 2.6%.

■ Increase in services generated demand:

The number of passengers on the newly opened Berlin–Munich high-speed line has doubled. In the first 100



days following the launch in December 2017, more than a million passengers have travelled between the two cities.

■ Train travel as an alternative to flying:

Today, 40% of travellers between Berlin and Munich take the train. This makes DB Long Distance's trains more popular than flying (35%), driving (20%) or taking the bus (5%).

■ More capacity from the 2018 timetable change:

Starting from the December timetable change in 2018, DB Long Distance will

be operating two additional ICE Sprinter services between Berlin and Munich and introducing the latest generation of trains, the ICE 4, to the market. This will allow DB to offer 3,000 additional seats a day.

■ Focus on protecting the climate:

In 2017, DB Long Distance operated some 75% of journeys using renewable energy. For 2018, the figure will be 100%. New trains increase energy efficiency. The ICE 4 consumes some 22% less energy per seat than a comparable ICE 1.



Regional and local rail in Germany in 2017

- German market remains attractive:** The German market for regional and local rail passenger transport will continue to grow in the coming years, remaining one of the most appealing in Europe. Increasing provision of regionalisation funding is creating stability. Numerous competitors have become established market players.
- Competitors increasing market share:** DB Regio's competitors saw a moderate expansion in

their market share of the transport volume provided in regional and local rail passenger transport in 2017. The market share was 33.2%, compared to 32.9% in 2016.

- DB Regio carried more passengers:** The company successfully defended its market position with a 2.7% increase in passenger numbers. The aim remains to defend existing networks and win new ones.

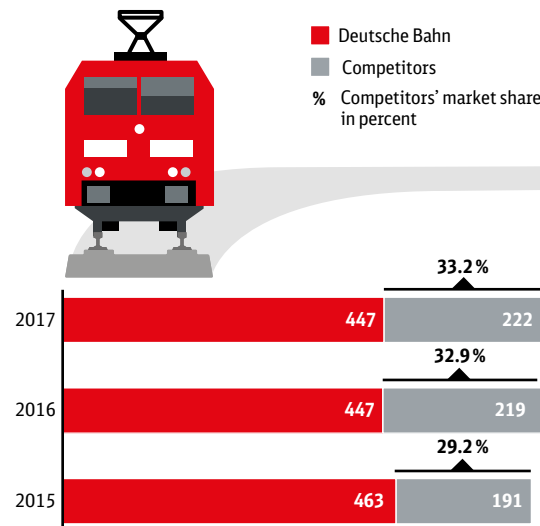
- 24 competitive tenders:** Client bodies concluded 24 contract award procedures in 2017. Some 75 million train kilometres per year were awarded. DB Regio won 14 contracts, encompassing around 55.5 million train kilometres a year.

- Services also divided up into different contracts:** In the past, local authorities generally requested integrated bids combining vehicle procurement and financing, fleet management, operation, maintenance and sales. Increasingly, calls for tender are being issued for individual services, including pure train operation.

- DB Regio aims to remain market leader:** Success depends on competitive costs, growth in the maintenance market segment and innovation. Examples include seat

reservations in regional and local transport and the expansion of Wi-Fi in cooperation with local authorities.

Regional train services ordered
(in million train kilometres)

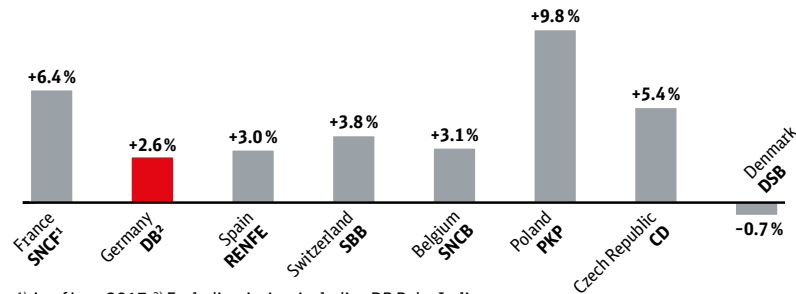


European rail passenger transport in 2017

- **Positive environment for European transport markets:** Rising employment and disposable incomes bolstered demand for transport services in 2017. Rail is benefiting from rising fuel prices.
- **Substantial growth in rail:** In European passenger rail, transport volume rose 4.0% in 2017 (2016: +1.5%).
- **Poland, France and the Czech Republic led the way:** The largest growth was recorded by the Polish PKP (+9.8%) and the French SNCF (+6.4%). The Czech CD achieved a gain of 5.4%.
- **High-speed traffic was the driver:** Growth in Poland was primarily attributable to the flourishing high-speed services offered by PKP Intercity. SNCF

Performance of rail passenger transport in Europe in 2017

(based on transport volume, percentage change year on year)



¹⁾ As of June 2017 ²⁾ Excluding Arriva, including DB Bahn Italia



benefited from the opening of two new high-speed lines.

- **Liberalisation tapping market potential:** There are large differences between national passenger rail markets across Europe in terms of the ex-

tent of market opening. This is despite the fact that consistent measures to liberalise markets tend to result in above-average growth in transport volume. Finland has announced market opening for 2020.

German market in 2017



The freight transport market grew, particularly due to increasing road haulage. Rail freight transport remained at the previous year's level.

- **Strong economic growth increased freight transport:** The strongest economic growth for six years (2.5%) meant that 2017 was another successful year for the German freight market.
- **Booming freight transport:** Robust domestic demand and, in particular, the boom in foreign trade meant that the growth in transport volume accelerated again on the previous year. Transport volume increased by 1.8% (2016: +1.0%) from 655.9 billion tonne-kilometres (2016) to 667.7 billion tonne-kilometres.

Further rise in truck transport:

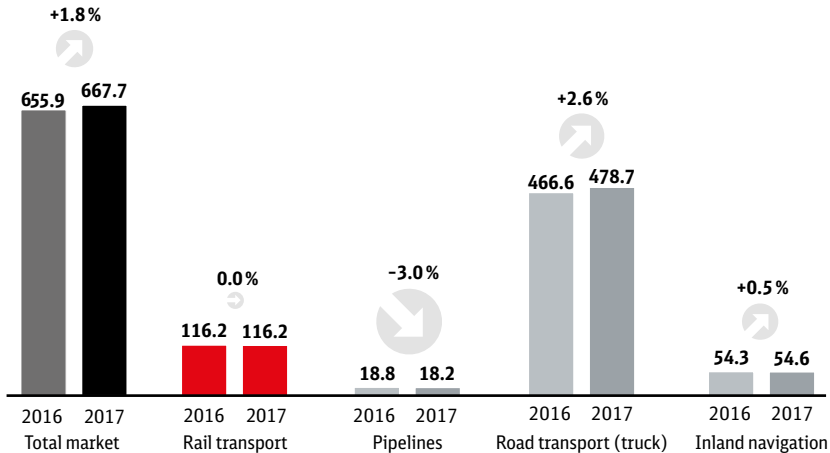
This development was driven by road haulage. Transport by truck was up by an above-average 2.6%. As a result, road haulage was able to expand its market position for the fourth consecutive year and achieved a 71.7% share of the total market (2016: 71.1%).

Freight railways match previous year's performance:

At 116.2 billion tonne-kilometres in 2017, the transport volume in rail freight remained at the level of 2016. Amid growth in the market as a whole, this meant that rail was unable to maintain its market share. The railways' share of the total freight market fell from 17.7% (2016) to 17.4% (2017).

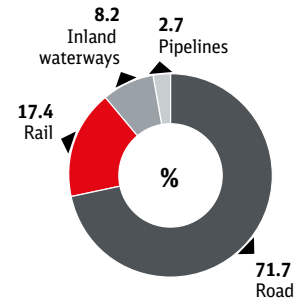
Development of the German freight transport market

(billion tonne-kilometres, percentage change year on year)



Modal split

(based on transport volume)



Positive outlook for 2018: For the coming year, the authors of a study prepared on behalf of the Federal Office for Goods Transport expect gains of 1.6% in road haulage and 1.5% in rail freight transport.

Weaker growth forecast for subsequent years: According to the study, both modes of transport will continue to grow in the years that follow, but at a declining rate. The study anticipates considerably weaker growth for the period to 2021.

Rail freight transport in Germany in 2017

■ Challenging market environment:

Rail freight transport in Germany was faced with two adverse developments in 2017. The volume of goods particularly suited to transport by rail, such as coal, mineral oil and chemical products, declined. Meanwhile, one-off effects due to storms and the seven-week closure of the European corridor between Karlsruhe and Rastatt in late summer prevented better results.

■ Stable volume in rail freight transport:

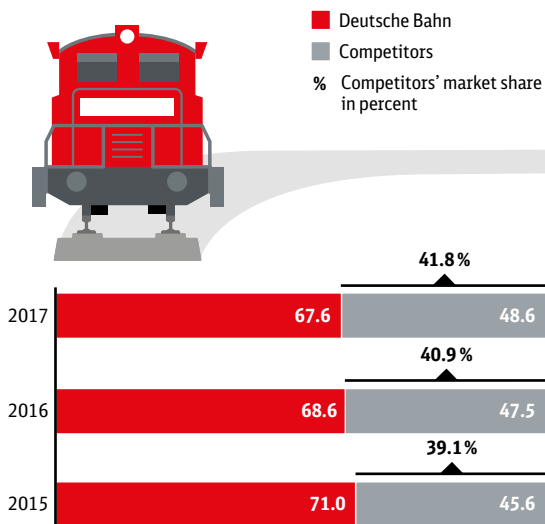
The intramodal trend of recent years continued in 2017. Despite weaker growth than in the previous year, DB Cargo's competitors increased their transport volume by 2.5% from 47.5 billion tonne-kilometres to 48.6 billion tonne-kilometres, reaching a market share of 41.8%.

■ Strategic importance:

Rail freight transport remains

Development at DB Cargo and other freight operating companies

(transport volume in billion tonne-kilometres)



essential to both the economy and the climate. Freight trains reduce the number of trucks on the road and have a smaller carbon footprint than road haulage.

- **Good for the environment:** Rail freight transport consumes only a third of the energy of road haulage, meaning it can better support climate policy targets. Rail freight companies are equipping their wagons with quiet brakes to halve noise emissions from rail traffic by 2020. Two-thirds of the DB Cargo fleet was already running on quiet brakes in 2017 (44,000 out of 64,000 wagons).

- **Improved environment for rail in sight:** In the future, rail freight transport will be able to make better use of its strengths when the Rail Freight Master Plan, agreed in 2017 between the Federal Ministry of Transport and the industry, is put into practice.

- **Increasing capacity and reducing the burden on rail**

companies: The Master Plan comprises measures to increase infrastructure capacity, boost innovation in rail freight and reduce the burden imposed by taxes and charges – for example, by cutting track access charges. A more competitive rail freight industry will be able to play a bigger part in the growth of the future.





European rail freight transport in 2017

■ Growth in European rail freight transport:

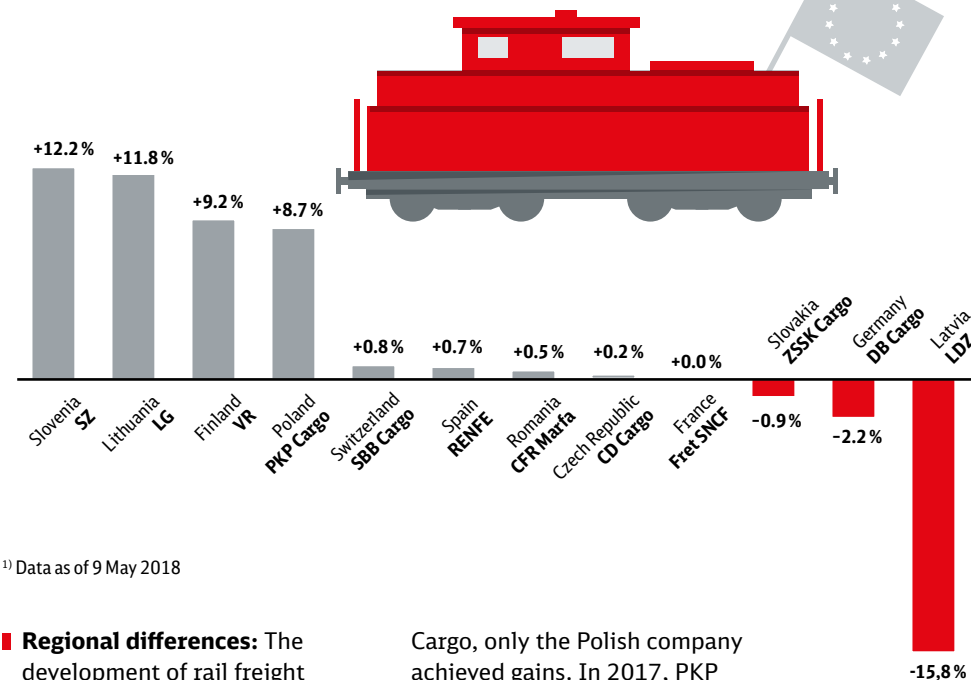
The strong economy provided European rail freight companies with higher demand for transport in 2017. With the volume of transport up 3.0%, the overall European market for rail freight transport recorded its fastest growth since 2011.

■ Rail freight operators expanding:

Many rail freight companies benefited from the positive economic situation and increased their services accordingly. A look at selected European rail companies shows that the majority improved their performance year on year.

Development of selected freight operating companies in Europe ¹⁾

(based on transport volume, percentage change year on year)



¹⁾ Data as of 9 May 2018

■ **Regional differences:** The development of rail freight operators differed greatly between countries in some cases. Of the three largest freight operating companies, DB Cargo, SNCF Fret and PKP

Cargo, only the Polish company achieved gains. In 2017, PKP Cargo increased transport volume by almost 9%, probably due among other factors to the rapid growth in traffic between China and Europe.

Use of the rail network in Germany in 2017



The rail network is experiencing rising demand and growing customer numbers. Modernisation is proceeding at full speed.

- **More traffic on the rail network:** Operating performance on DB's lines saw a slight positive trend in 2017, going from 1,068 million train-path kilometres in 2016 to 1,073 million train-path kilometres in 2017. This represents an increase of 0.5%.
- **Demand remains high:** The growth was primarily attributable to higher demand from DB's competitors. At 331.3 million train-path kilometres, their operating performance was up 2.9% in 2017 (2016: 321.9 million train-path kilometres).

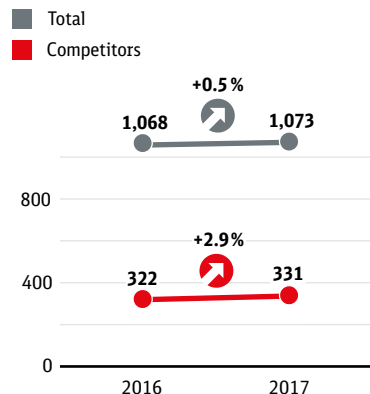
■ **Customer numbers up again:**

A long-standing trend continued in 2017: the number of railway undertakings on the rail network rose further, reaching 431 (2016: 421). Around half of these companies provide freight services, while just under one-quarter are active in the passenger transport market. The remaining customers supply construction sites, for example, or operate measurement and inspection trains.

■ **Working timetable challenge:**

For the 2017 working timetable, DB Netz concluded 78,378 track access agreements with rail companies. This was a very high figure, up 14% on the previous year with 68,719 agreements.

Competitors' operating performance
(million train-path kilometres)



Modernisation of the German rail network

■ **Extensive construction works in 2017:**

A decisive reason for the sharp rise in the number of track access agreements was the ongoing infrastructure modernisation programme. This brought with it an enormous growth in construction, which needed to be factored into the working timetable. There were 1,286 construction sites in

2017, 79% more than in 2016 (719 sites).

■ **Long-term planning and consolidation of construction sites:**

Optimised construction site management by DB Netz enables sites to be integrated into timetabling well in advance. DB Netz achieves this by setting aside time blocks to combine

Infrastructure

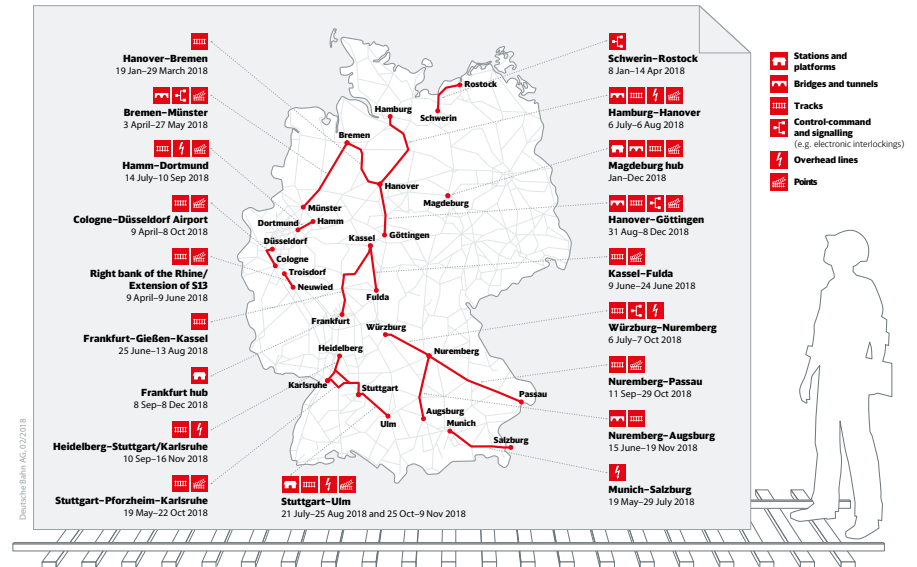
work on sites located in close proximity. This enables extensive work to be completed on a large number of essential modernisation measures in the shortest possible time.

■ **Modernisation program remains ambitious:** A let-up in

the scale of construction work is not yet in sight. In 2017, DB invested a total of €7.5 billion on behalf of the Federal Government in infrastructure building, expansion and modernisation. A further €9.3 billion will follow in 2018 on a multitude of projects.



Key construction corridors of national importance in 2018





■ **Digital Rail for Germany:** With the plan to digitalise the entire rail network, the pioneering investment and innovation project of the future is already taking shape. It includes digitalising control and command technology and interlockings, as well as introducing more new technologies.

enables trains to run at shorter intervals, making better use of infrastructure. This allows more capacity on the rail network. At the same time, the digital railway improves quality and reduces costs.

■ **Infrastructure boosts competitiveness of rail transport:** The digital railway



Digital Rail for Germany



Passenger transport

Transport volume in Germany, in billion passenger kilometres	2012	2013	2014	2015	2016	2017 ³⁾
Rail	88.8	89.6	91.0	91.7	95.9	97.5
Regional and local total	51.4	52.8	54.9	54.8	56.5	58.5
DB regional/local services	43.4	43.7	43.7	42.7	40.9	42.0
Other railways	8.1	9.4	11.4	12.3	15.6	16.5
PRT ¹⁾	68.9	69.8	71.3	72.6	72.9	72.9
PMT ²⁾	914.6	921.4	935.0	945.7	965.5	975.2
Air travel, domestic in Germany	10.3	9.9	10.0	10.1	10.4	10.4
Total market	1,082.6	1,090.7	1,107.2	1,120.1	1,144.7	1,156.0

¹⁾ Public road transport, following the territory principle ²⁾ Private motorised transport

³⁾ Some 2017 figures are preliminary



Freight transport

Transport volume in Germany, in billion tonne-kilometres	2012	2013	2014	2015	2016 ⁴⁾	2017 ⁴⁾
Rail	110.1	112.6	112.6	116.6	116.2	116.2
DB Group	78.5	75.2	74.8	71.0	68.6	67.6
Other railways	31.5	37.4	37.8	45.6	47.5	48.6
Road	432.0	443.7	452.9	460.0	466.6	478.7
Inland navigation	58.5	60.1	59.1	55.3	54.3	54.6
Pipelines	16.2	18.2	17.5	17.7	18.8	18.2
Total market	616.8	634.5	642.1	649.6	655.9	667.7

⁴⁾ The figures for road and total market (and rail in 2017) are preliminary



Infrastructure

Operating performance in Germany, in million train-path kilometres	2012	2013	2014	2015	2016	2017
On the network	1,039	1,035	1,044	1,054	1,068	1,073
Of which non-Group customers	231	247	261	290	322	331

More information is available at:

www.deutschebahn.com/en/group/competition

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After completion of this report, the Federal Statistical Office made an upward correction to the 2016 figures for rail freight traffic in Germany. This was due to the scope of reporting being increased for the first time in many years, which meant that additional rail freight companies were included for the first time. The effect of this is to increase rail's share of the modal split and reduce DB Cargo's market share.



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