30

years of
Rail Reform

Dear Readers,

January 1, 2024 marked the 30th anniversary of the German Rail Reform. The Rail Reform of 1994 was a key milestone in the reorganization of the rail transport sector in Germany and saw the birth of Deutsche Bahn AG.

This anniversary is also a significant event for me personally. I joined “Team DB” in 1994, and so have experienced every phase of the company’s development at first hand from the very beginning. As the years have come and gone, they have brought us different challenges and different political environments to navigate. There have been many highs in the last three decades, but also some lows.

In this short brochure, we look at the evidence and take stock of the last 30 years. Although the goals associated with the Rail Reform have largely been achieved, it is clear that problems have also arisen and that large-scale action is required to address them. This is particularly true when it comes to the current condition and quality of our infrastructure, which is too old, is too prone to faults and has too little capacity in many locations. Together with the federal government and the entire industry, we are now tackling this challenge systematically, working step by step to make rail more reliable again.

With our “Strong Rail” corporate strategy, we have a clear compass for our development in the coming years. Following the transport policy objectives of the German government, we are aiming for significant growth in transportation volumes. In concrete terms, this means increasing the market share of rail freight transport to 25% and doubling the volume of rail passenger transport.

Together with all rail companies, we will make a significant contribution to improving the transportation sector’s carbon footprint. Rail is the only mode of transport that has been able to reduce its CO_2 emissions since 1990, achieving a significant 70% cut. By fully decarbonizing the DB Group by 2040 at the latest and facilitating further modal shift to climate-friendly rail, we will continue to follow through with this transformation.

I am convinced that the reform package for the public service infrastructure, which took effect on January 1, 2024, will set the right direction and put in place what is needed to achieve the growth targets. In other words, the Rail Reform is a success story that we continue to write.

Sincerely,
Dr. Richard Lutz
Chairman of the Management Board and CEO
of Deutsche Bahn AG

30 years of Rail Reform

Contents

The 30 years of the Rail Reform – an overview

The German Rail Reform came into force in January 1994. It still shapes government and commercial activity in the rail system today. The reform came with three objectives: generating more traffic for rail, relieving pressure on the federal budget, and the financial restructuring and stabilization of the rail company Deutsche Bahn AG (DB AG). These goals have largely been achieved. But today, there is renewed need for action and reform.

Volume sold grew by 46% in rail passenger transport between 1994 and 2022 and by 91% in rail freight transport. In 2023, noticeable growth in rail passenger transport continued following the end of the pandemic. Rail has been able to halt the loss of market share seen in the decades preceding the Rail Reform and slightly expand its position in intermodal competition.

Pressure on the federal budget was significantly relieved in the first 20 years after the Rail Reform, and federal government payments to DB had roughly halved by 2014. This vastly increased the efficiency of public spending relative to transport volume. Starting in 2015, the federal government began to steadily increase the state funding again.

DB AG has gradually developed into a company with positive financial results and significantly increasing revenues. In the first few years after the Rail Reform, the primary focus was on increasing productivity. This was followed from 2002 onward by the strengthening of cross-border traffic and international growth.

Since 2010, the spotlight has been on sustainability, with increasing investment in growth and climate protection. This has been given a further significant boost since 2019 with the Group's Strong Rail strategy. Today, it is clear that – despite the right regulatory course being set and the successes mentioned above – there is a need for readjustment, both in the wider framework and within DB itself. The first 20 years or so following the Rail Reform were characterized by a strong focus on increasing efficiency. From today's perspective, however, this resulted in underinvestment in the performance and capacity of the rail infrastructure. The infrastructure cannot cope with the constantly growing volume of rail traffic. The system lacks robustness, resilience and capacity reserves. The consequences of these opposing developments are considerable quality deficits.

The goal of growing rail traffic further is a policy objective anchored in the German coalition agreement of December 7, 2021. More specifically, the market share of rail freight transport is to increase to 25% by 2030, and passenger transport volume is to be doubled.

This follows on from the transport policy objectives of the last legislative period, which DB adopted in its Strong Rail Group strategy in 2019. Transport policy, the federal government and the industry are acting in lockstep to achieve this, with DB and the rest of the rail sector keen to realize growth.

Efficient and high-quality infrastructure is an absolute prerequisite to reaching the ambitious targets. But the current reality does not provide this: the infrastructure is too old, too prone to failure and overloaded in many parts of the network and at important transport hubs. There is a large investment backlog, which has continued to increase in recent years, despite the additional funds invested by the federal government and DB. For around ten years now, customers, politicians and the industry have been increasingly dissatisfied with the quality of the rail service. Multiple programs have been launched by DB and the industry to stabilize the system: the “round table on construction management,” “Zukunft Bahn” program and “Agenda for a better rail service” are prominent examples. However, changes in the system alone have not succeeded in bringing the consequences of the investment backlog and high capacity utilization under control. As the pandemic eased and demand in passenger and freight transport began to tighten again at the end of 2021, the system reached a tipping point. The industry is sounding the alarm about the many restrictions it faces, while punctuality, especially on long-distance services, is at an all-time low.

All this means considerable action is needed. This action must encompass infrastructure programs for the renovation and modernization of the network and stations, the legal basis, the volume and structure of funding, and the general orientation of rail infrastructure.

Against this backdrop, the German government has introduced reforms aimed at making infrastructure fit to serve the public interest. These included the launch of a new infrastructure company, DB InfraGO AG, on January 1, 2024.

A far-reaching infrastructure modernization program is part of the process. This journey, which the federal government, the industry and DB are taking together, is a major undertaking in terms of the time it will take and the money it will involve. It will also demand a great deal of understanding from passengers and freight customers. Only by implementing this full-scale program, however, will it be possible to achieve the transport policy goals of growth and modal shift.

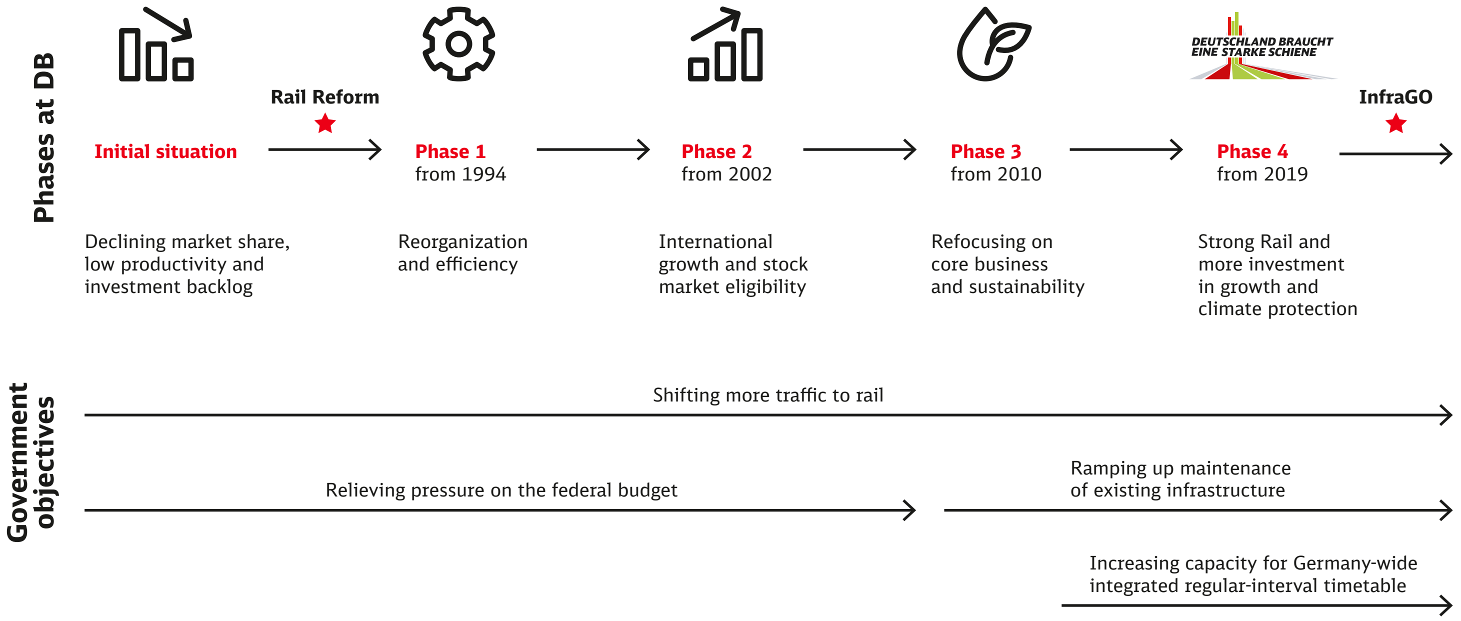
In addition to strengthened infrastructure, the policy framework surrounding the various modes of transport is also of crucial importance for the development of rail. The federal government has provided important impetus in this area in recent years. This primarily affects regional and local rail passenger transport – which have seen an increase in federal funding and the introduction of the Deutschland-Ticket – and rail freight transport, where the government has funded part of the infrastructure access cost. Now a support scheme is also being introduced for single freight car transport, which currently runs at a large loss. This will enable the continuation of this transport segment, which is fundamental to the logistics chains of the German economy.

The current changes are therefore in line with the objectives and instruments of the Rail Reform. They are compatible with German and European rail reform legislation. And at the same time, they are taking the action needed to once again make Germany a role model for smooth-running rail infrastructure in a connected Europe.

The next sections of this brochure explore the main developments since the Rail Reform, beginning with the reform’s background and objectives. This is followed by a review of the past 30 years, which also indicates where action is now needed. The brochure concludes with a detailed overview of the reform package for public service infrastructure.

The commercial and political challenges are changing

Phases since the Rail Reform



Initial situation before the Rail Reform

Since the 1950s, rail had continuously lost market share in the competition between modes of transport. Public rail entities in the two Germanies ran at a heavy loss. In 1991, the Bundesbahn government commission identified a need for comprehensive reform.

In West Germany, rail steadily lost market share from 1950 onward as it became less important in both passenger and freight transport. Rail’s share of passenger transport fell from 36% in 1950 to around 7% in 1993, while its share of freight transport declined from 56% to just under 17%. This was primarily due to the development of road transport into a mass phenomenon, which was additionally promoted by transport policy priorities such as the liberalization of road transport. For decades, significantly more funds were invested in road than in rail.

The picture at the Reichsbahn in East Germany was more nuanced. While rail lost market share in passenger transport here too, it long retained a large share of freight transport. The government required the Reichsbahn to transport freight even over short distances.

As a consequence of rail’s declining importance, the West German Deutsche Bundesbahn became increasingly loss-making. This represented a burden for the federal budget.

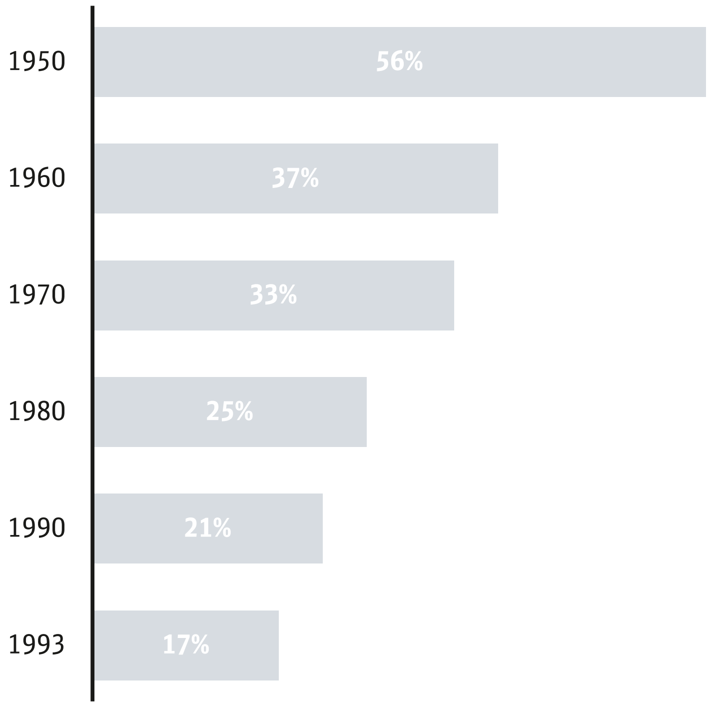
After German reunification, the federal government decided to merge Deutsche Bundesbahn and Deutsche Reichsbahn.

With Deutsche Reichsbahn also in deficit, the financial situation for the government was worsening. The need for action was abundantly clear from the joint annual financial statements of the two rail companies for 1993, which revealed a total net loss for the year of DM 15.6 billion. The total revenues of DM 16.9 billion did not even begin to cover the personnel costs of DM 26.3 billion. The two companies owed a total of DM 66.2 billion to lenders in 1993.

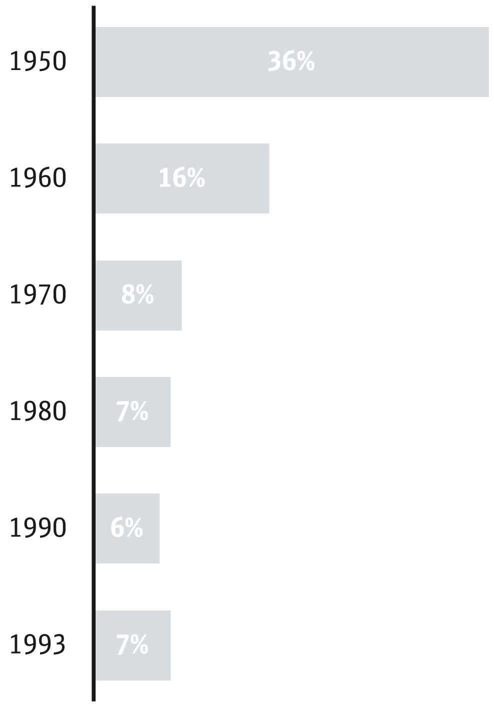
A Bundesbahn government commission had already been set up back in 1989 to draw up reform proposals. Its assessment predicted a bleak future for the rail system unless far-reaching measures were taken. It also highlighted the enormous risks for the federal budget. The commission’s final report in 1991 concluded that, “Without fundamental restructuring, there is no hope of stabilization for the German rail system. Over the next ten years, the two rail companies will incur losses of DM 266 billion. The total financing requirement for the federal government in this period threatens to exceed DM 400 billion. This scenario is no exaggeration. On the contrary, the risks of a worse outcome are large.”[1]

[1] 1991 report by the Bundesbahn government commission, page 11

Rail’s market share of freight transport volume, former West German states
in percent



Rail’s market share of passenger transport volume, former West German states
in percent



Market share of rail

Sources: Verkehr in Zahlen, various editions

Objectives and instruments of the Rail Reform

DB AG was founded as a commercial enterprise under private law in 1994. The three main objectives of the Rail Reform were to increase rail traffic, to relieve pressure on the federal budget and to financially restructure and stabilize DB AG.

The comprehensive Rail Reform was implemented on January 1, 1994, based on the proposals of the Bundesbahn government commission. The second stage of the Rail Reform followed on January 1, 1999 with the spin-off of the regional and long-distance passenger transport, freight transport, stations and track divisions as stock corporations. The Rail Reform pursued three key objectives:

1. Increasing rail traffic
2. Relieving pressure on the federal budget
3. Financially restructuring and stabilizing DB AG.

It was implemented by means of two instruments:

1. Clear separation between state and company

a) Conversion of Germany's national rail companies Deutsche Bundesbahn and Deutsche Reichsbahn into a stock corporation and strict commercial focus of DB AG as an integrated Group. Management as a commercial enterprise under private law was enshrined in Article 87e (3) of the Basic Law for the Federal Republic of Germany. The federal government took on the old debts of the two rail companies, assigning them to the Federal Railway Property Agency (BEV).

b) Certain responsibilities exercised by the federal government (including the BEV and the German Federal Railway Authority) and federal states, particularly infrastructure (responsibility lies with federal government) and local and regional rail passenger transport (responsibility lies with federal states).

2. Opening up the rail infrastructure to competition

With the Rail Reform, the rail infrastructure was completely opened up to competition from 1994. Since 2006, non-discriminatory access has been overseen by the German Federal Network Agency as a regulatory authority with extensive powers.

In addition, a higher weighting for rail when it comes to transport investments is to improve rail's position in intermodal competition, marking a shift away from the road-focused prioritization of past decades.

Taking stock of the Rail Reform 30 years on

The objectives associated with the Rail Reform have largely been achieved. Rail traffic has grown. Pressure on the federal budget was significantly relieved over the first 20 years. Public budget contributions from the federal government increased again beginning in 2015. DB AG gradually developed into a company with positive financial results. DB AG's net capital expenditure has increased in recent years.

Traffic levels

The volume of rail transport has increased significantly since 1994. In both passenger and freight transport, rail has been able to halt the loss of market share seen in the preceding decades and slightly improve its position in intermodal competition.

The volume of rail passenger transport increased by 46% between 1994 and 2022. This figure includes the significant Covid-related slump in demand, from which recovery was still ongoing in 2022. Rail's market share in intermodal competition increased from 6.7% to 9.3% over this period.

Growth in rail passenger transport was driven by both long-distance and regional/local transport. Regional and local transport, which receives federal funding, grew by 71% between 1994 and 2022. In the same period, the volume of long-distance transport, which operates on a purely commercial basis, increased by 25%. Following a consolidation of services in the first few years after the Rail Reform – particularly in 2002/2003 – the increase in demand for long-distance transport has primarily been due to an entrepreneurial new service campaign introduced over the last ten years.

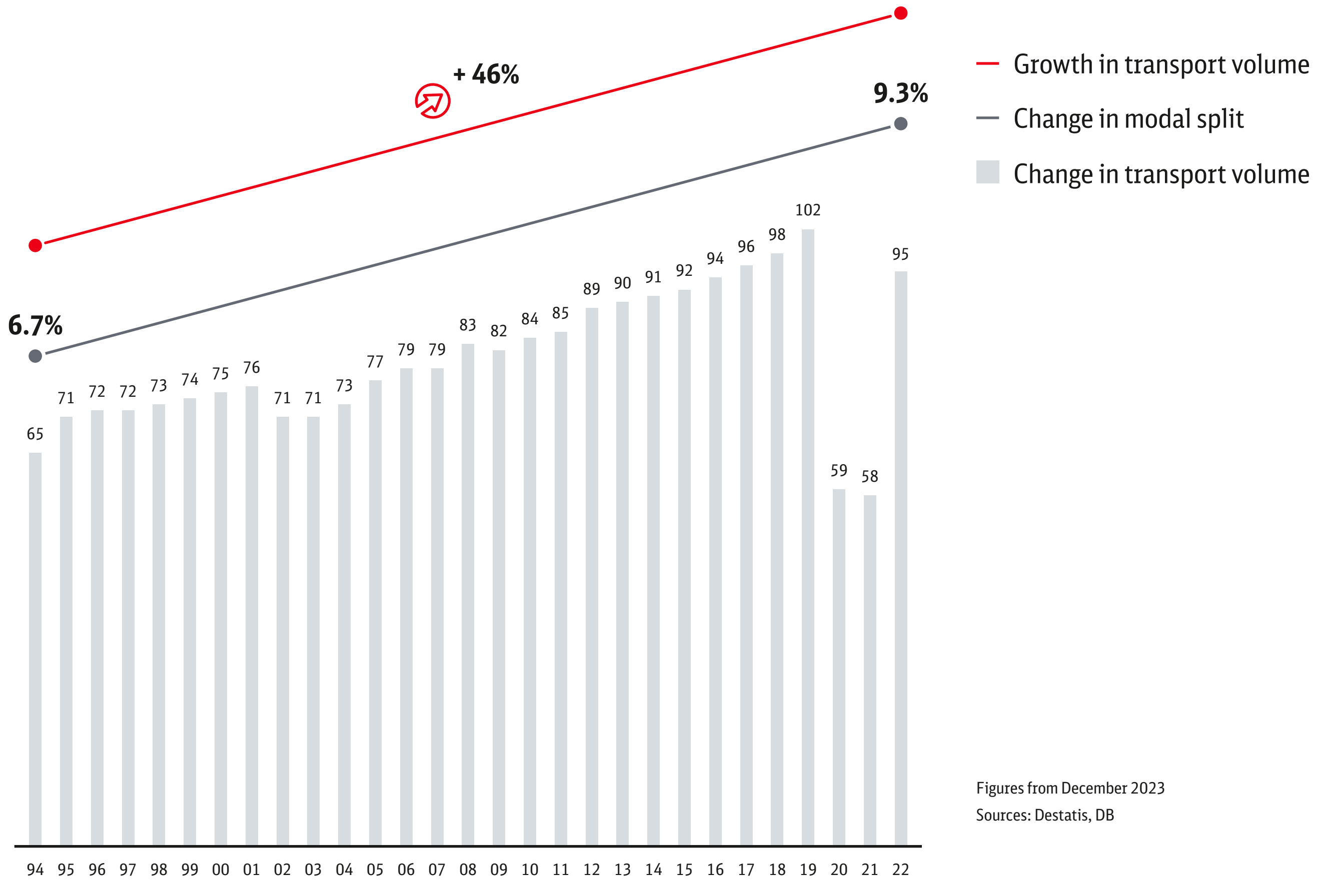
The recovery in demand continued in 2023. With significant growth in transport volume of around 10% year on year, rail passenger transport is expected to return to pre-pandemic levels.

Volume sold has risen faster than the overall market, which means that rail's market share has also increased further. In regional and local transport, the introduction of the Deutschland-Ticket in May 2023 has had a positive effect on demand. In long-distance transport, the recovery means that transport volume in 2023 is expected to surpass the previous peak reached in 2019.

In rail freight transport, volume sold rose by 91% between 1994 and 2022. Rail's market share in intermodal competition increased from 16.7% to 19.3% over this period. At 134.8 billion metric ton kilometers, transport volume reached its highest level since the Rail Reform in 2022. Given the economic slowdown, however, particularly in major industries for rail freight transport such as chemicals and steel, demand in 2023 is expected to fall short of this 2022 figure.

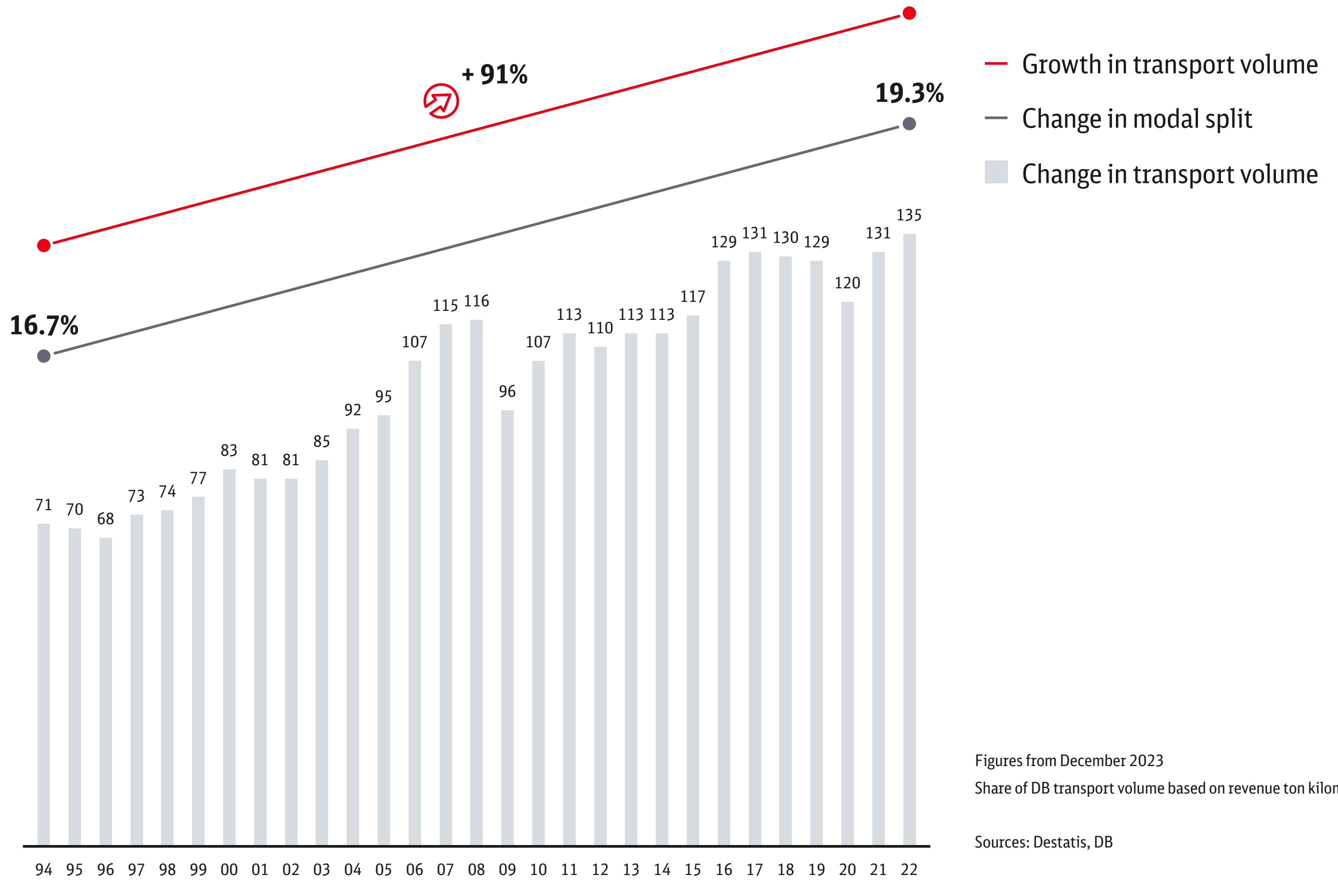
With the growth in rail passenger and rail freight transport, the operating performance on the network has also increased. By 2022, it had risen 29%. As a result, network capacity utilization has increased significantly (see "Current areas for action" section).

Transport volume and development of modal split in rail passenger transport 1994–2022
Germany, in billion passenger kilometers and percent



Figures from December 2023
Sources: Destatis, DB

Transport volume and development of modal split in rail freight transport 1994–2022
Germany, in billion metric ton kilometers and percent



Figures from December 2023
Share of DB transport volume based on revenue ton kilometers

Sources: Destatis, DB

Competition trends

Fully opening up the rail infrastructure has been an important driver of growth in rail passenger and rail freight traffic. This has led to intense competition in the rail system.

Traffic operated by DB's competitors on the DB rail network has increased continuously. In 2022, 436 non-DB rail companies operated a total of 420 million train-path kilometers. This amounted to some 37% of the total operating performance on the network. In no other European country do so many competing companies use the rail infrastructure.

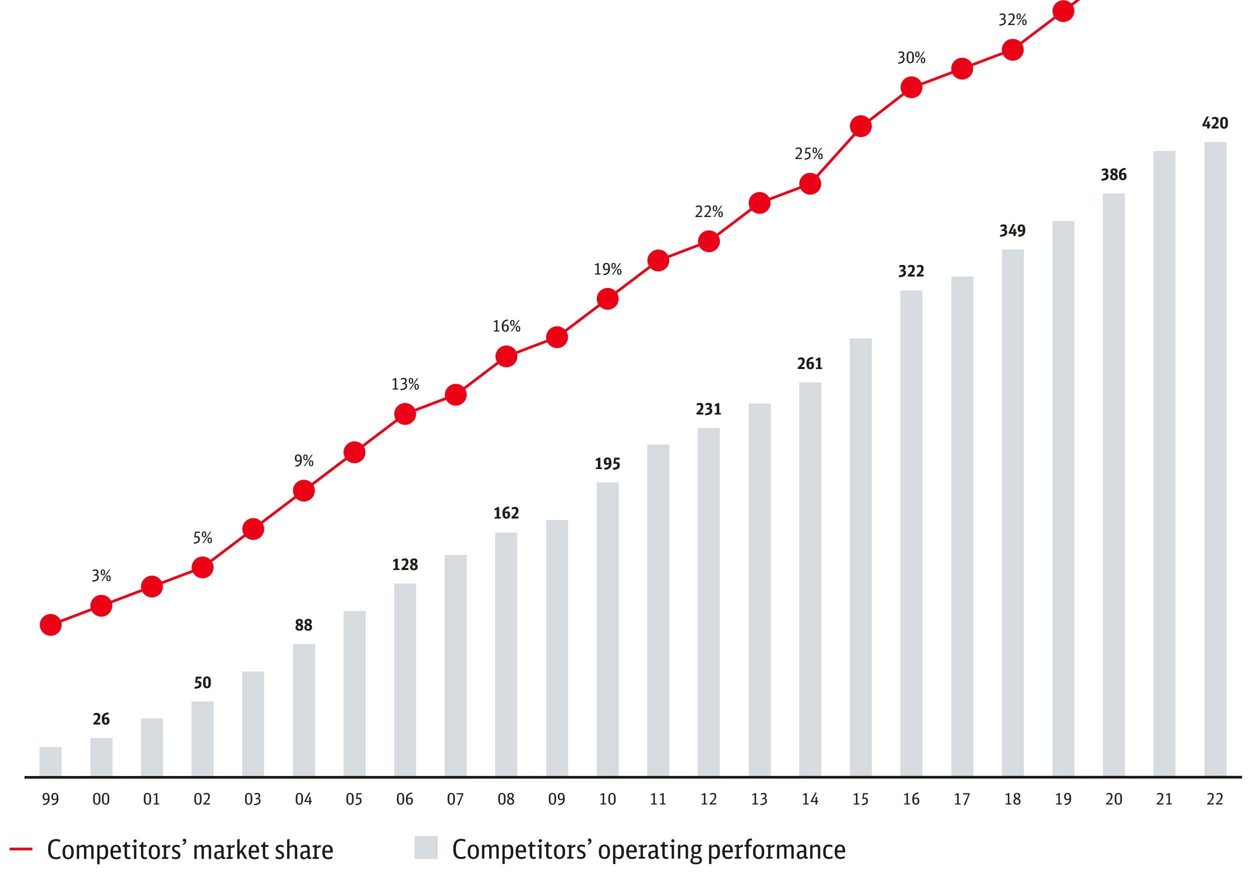
Trends in market share differ depending on the type of traffic.

In **rail freight transport**, there is intense intramodal competition, particularly in the block train and combined transport segments. Single freight car transport, which currently runs at a loss, is mainly operated by DB Cargo. Intermodal competition from road haulage is particularly intense in this segment. Across all segments, the non-DB rail companies achieved a market share of around 58% in 2022, measured in terms of transport volume. This was the highest figure since the Rail Reform was initiated.

The development of **regional and local rail passenger transport** is determined by the contracts awarded by the local transport authorities. In 2022, the non-DB rail companies achieved a market share of around 39% measured by operating performance. Significant changes in market shares can occur when award procedures for the long-running transport contracts lead to changes of operator.

Long-distance rail passenger transport is run on a purely commercial basis and faces intense intermodal competition from private motorized transport, long-distance buses and air travel. The segment involves major capital expenditure on rolling stock with long payback periods and high commercial risk. In this environment, non-DB rail companies have so far been unable to gain significant market share. Over recent years, an increase in transport volume has been seen, partly attributable to the operator FlixTrain. In 2022, the share of non-DB rail companies, measured in terms of transport volume, was around 4% according to the Federal Network Agency.

Operating performance and market share of non-federally owned rail companies on the DB network
in million train-path kilometers and percent



Sources: Destatis, DB

Government budget

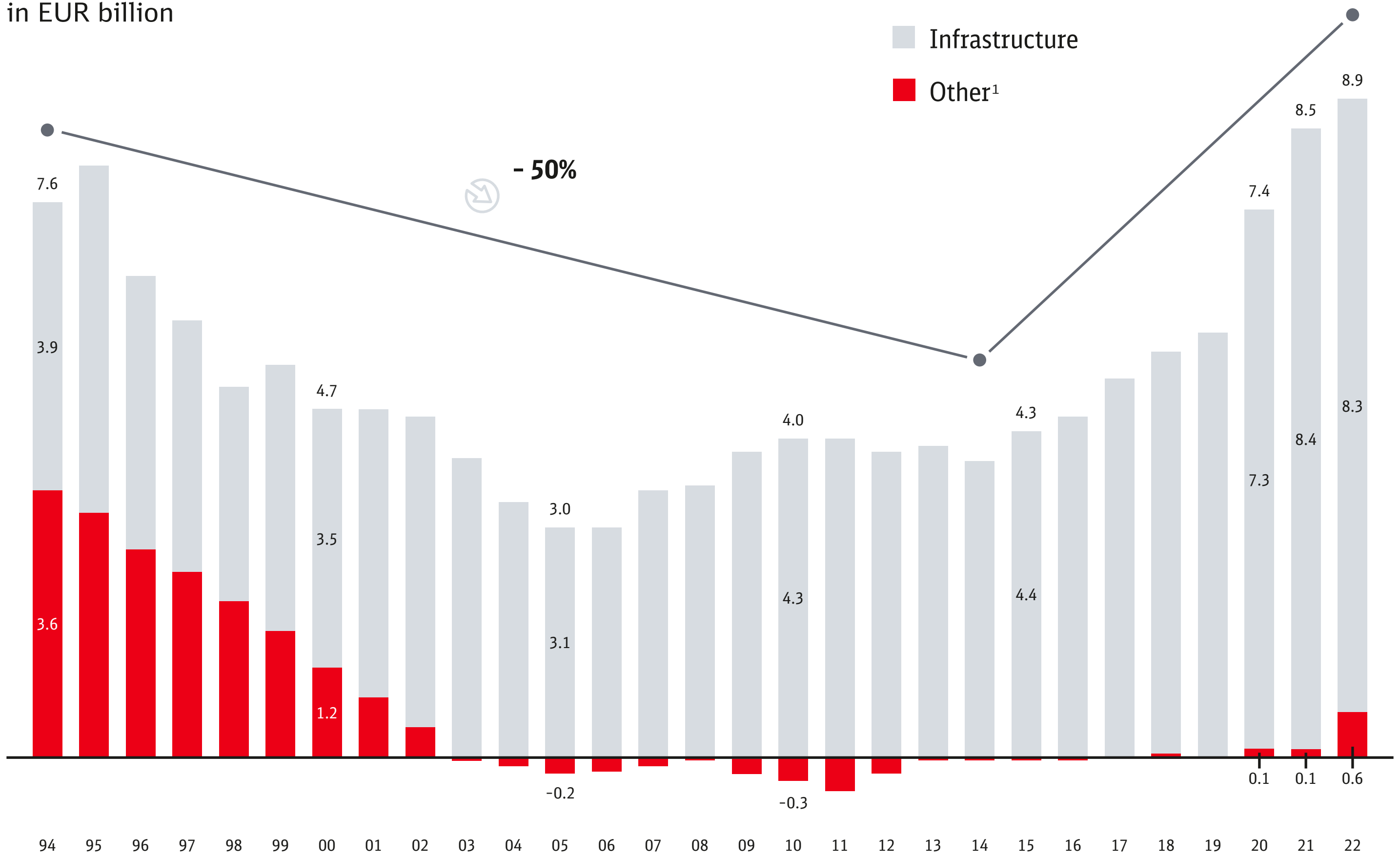
Pressure on the federal budget was considerably relieved in the first 20 years after the Rail Reform. Public funds were spent significantly more efficiently than before. Starting in 2015, the federal government began to steadily increase the state funding for rail again.

Federal public funding to DB declined especially in the first ten years after the Rail Reform. This applied to infrastructure grants as well as other funding. Infrastructure financing is based on construction grants from the federal government and DB's own contributions. Other grants have included compensation for non-investment pre-unification liabilities, which was intended to compensate for additional operating costs in the areas served by the former Deutsche Reichsbahn. This funding accounted for a high proportion of the state funding in the first few years after the Rail Reform, before gradually decreasing and then ultimately expiring in 2003. In the following years from around 2005, there was initially a slight increase in federal support, followed by a renewed decline until 2014. By that time, the funding had roughly halved from its 1994 level.

From 2015 to 2022, a sustained increase in federal funding was seen again. In infrastructure, this was due in particular to an increase in funding for the existing network under the Performance and Financing Agreement (LuFV), with new LuFVs between the federal government and DB starting in 2015 and 2020. Funds for new lines, line upgrades and special investment projects also increased.

In 2022, federal funding exceeded the nominal figure for 1994. Adjusted for inflation, this nevertheless equates to a decline in funding, the scale of which is even greater when the significant growth in transport volume since 1994 is considered.

Development of federal government payments to DB 1994–2022
in EUR billion



Source: DB

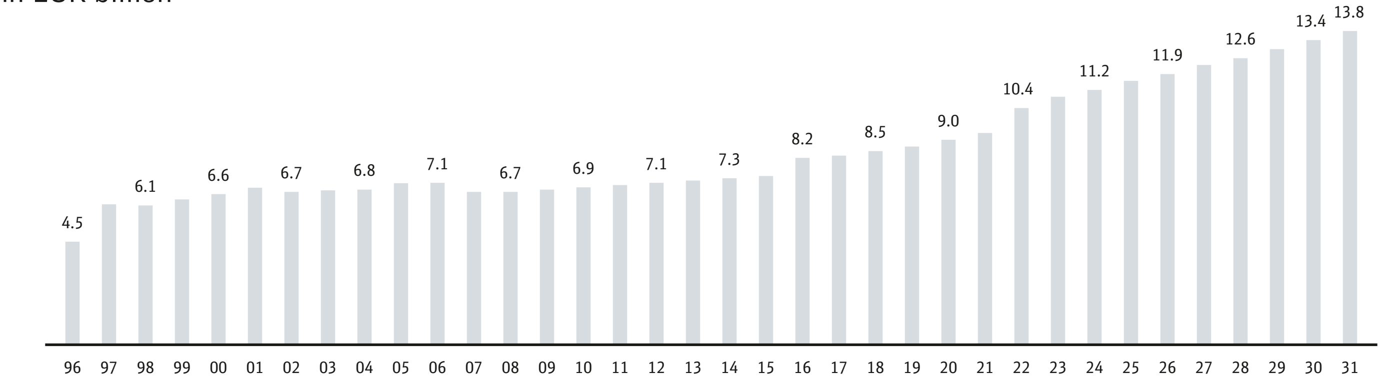
[1] Including non-investment pre-unification liabilities and federal funding instruments such as the reduction in track access charges for rail freight operators

Taking stock of the Rail Reform

In addition to the grants to DB, the federal government also supports rail transport through other instruments. In rail freight transport, the government pays a portion of track access and service facility access charges (the funds going to DB are included in other grants). By far the largest item is the funding that the federal government provides to the federal states to finance regional and local rail passenger transport in particular, which has been one of the factors behind the growth in this transport.

Here, too, a significant increase in federal contributions can be seen after 2015. While this funding increased only moderately overall between 1997 and 2015 from EUR 6.2 to 7.4 billion (some years saw cuts in funding), the figure increased to EUR 8.2 billion in 2016. This was followed by further increases in subsequent years. In 2022, the federal funding for regional and local transport services was increased by a further EUR 1 billion to EUR 10.4 billion. It will grow by 3.0% annually from 2023 to 2031. From 2023 initially until 2025, the federal government is contributing an additional EUR 1.5 billion per year to cover half of the additional costs arising from the Deutschland-Ticket.

Development of federal funding for regional and local transport service from 1996–2023 and planned development to 2031
in EUR billion



Sources: DB, German Public Transport Regionalization Act

Shown without additional federal government funding to compensate for impacts of the Covid-19 pandemic (EUR 4.7 billion 2020–2022) and to support the implementation of the 9-Euro-Ticket (EUR 2.5 billion in 2022) and Deutschland-Ticket (an agreed EUR 1.5 billion per year 2023–2025)

DB AG finances

Following the Rail Reform, DB AG has gradually developed into a company with rising revenues and positive financial results. Its net capital expenditure and workforce have increased significantly in recent years.

The development of DB AG since 1994 can be roughly divided into four phases (see page 7), each reflecting the different political and commercial requirements of the time. In the first phase, the focus was on reorganizing the company and increasing efficiency. This gradually reduced the high deficits and guided DB AG toward profitability.

After this reorganization, DB AG entered a phase of international growth beginning in the early 2000s, as it sought to make itself eligible for a stock market listing. The acquisitions of Schenker (2002) and Arriva (2010) took place during this period. Following the economic and financial crisis in 2008/2009 and the decision not to go public after all, the company refocused on its core business in Germany and on sustainability from 2010 onward. This phase was accompanied by a gradual increase in capital expenditure on the rail business.

The Strong Rail corporate strategy introduced in 2019 heralded the current phase of DB's development. With this overarching strategy, DB AG is committed to the federal government's transport policy goals and is consistently focusing its core business on expanding the necessary capacity (infrastructure, rolling stock, depots and personnel), making its products and services more attractive and improving the efficiency and effectiveness of its internal processes and structures. This is associated with a further significant ramp-up in net capital expenditure, including on digitalization. The green transformation of the company with ambitious goals in the areas of climate protection, nature conservation, noise control and resource conservation is a particular strategic action area.

Revenues and earnings

DB AG's revenues have increased significantly from EUR 14.8 billion in 1994 to EUR 56.3 billion in 2022. In addition to organic growth, this is also due to acquisitions – especially Schenker (2002) and Arriva (2010).

The development of DB AG's earnings in the first few years after the Rail Reform reflects the company's strict course of restructuring. Excluding compensation for pre-unification liabilities by the federal government, the operating result (EBIT) improved from a EUR 3 billion loss in 1994 to a EUR 0.5 billion profit in 2003 thanks to efficiency gains. In subsequent years, EBIT at DB AG was well into positive territory every year until the Covid-related slump in 2020. The Group returned to operating profit in 2022.

The picture in the individual business units is mixed. Given the strong intra- and intermodal competition, DB Regio and DB Cargo in particular have faced declines in market share and earnings. At DB Cargo, this development has led to sustained losses in recent years. A key factor here has been single freight car transport, which is important for rail logistics as a whole but cannot be operated economically in the current environment.

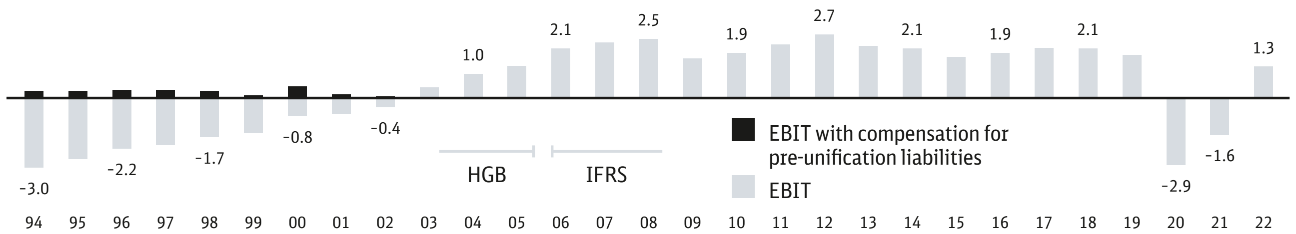
Long-distance passenger transport also faces strong competition. This comes primarily from other modes in the form of motorized private transport, air traffic and, since 2013, long-distance bus services. Thanks to large investments in quality and additional capacity, DB has been able to achieve significant growth in revenues and earnings in long-distance transport over recent years. After an interruption due to the Covid-19 pandemic, the positive trend has recently resumed.

The infrastructure companies initially posted annual losses until 2006 before earnings figures turned positive for the first time. Profits from infrastructure are regulated by the German Federal Network Agency. The upper limit permitted under these rules has not been reached in any year. Since 2015, there has also been a financing cycle in which profits from infrastructure are passed on to the federal government, which then returns them as construction grants for replacement investments in the existing network.

DB Schenker has made a positive and increasing contribution to the earnings of the major affiliates over time. The company has achieved record results in recent years. This was mainly due to the special situation in the wake of the Covid-19 pandemic, with high market demand and capacity bottlenecks in air and ocean freight resulting in high freight rates.

Development of DB AG revenues 1994–2022
in EUR billion

Development of EBIT at DB AG 1994–2022
in EUR billion



Revenues adjusted for special items resulting from Stinnes acquisition

Source: DB

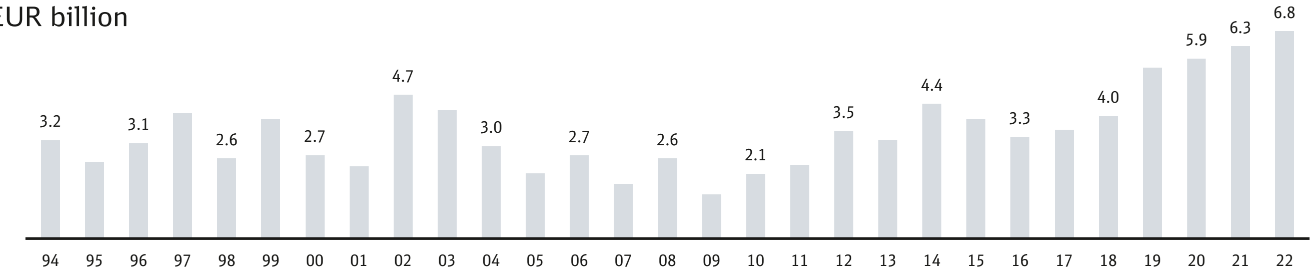
Development of capital expenditure and total headcount

There has been a significant increase in DB AG's net capital expenditure, i.e. gross capital expenditure less investment grants from the federal government and third parties, in recent years. This began around 2010 and intensified significantly from 2019 with the implementation of the Strong Rail corporate strategy.

Having amounted to EUR 2.1 billion in 2010, net capital expenditure more than tripled to EUR 6.8 billion in 2022. In addition to investments in infrastructure (2022 = EUR 2.2 billion), capital expenditure on rolling stock and depots to increase capacity has also expanded.

This has been accompanied by a significant increase in personnel over recent years. The number of employees (measured in full-time equivalents) fell from 331,000 in 1994 to a low of 214,000 in 2001 during the restructuring phase, and was then driven until 2010 (276,000 employees) primarily by acquisitions and further productivity increases. The workforce has been growing continuously since 2011 – both overall (to 324,000 in 2022) and in recent years increasingly in DB's rail infrastructure and operations. Almost 20,000 extra employees have joined this area in the last five years alone (the workforce here rose from 190,000 in 2018 to 209,000 in 2022).

Development of net capital expenditure at DB AG 1994–2022
in EUR billion



Source: DB

Current areas for action

Following a strong focus on increasing efficiency in the first 20 years after the Rail Reform, the federal government and DB changed course in 2015 and increased their investment in rail capacity. Yet even today – despite the right regulatory framework being set and the successes of the Rail Reform – there is still a need for readjustment, both in the wider framework and within DB itself. The infrastructure cannot cope with the constantly growing volume of rail traffic. The system lacks robustness, resilience and capacity reserves. Considerable quality deficits are the result. At the same time, in recent years the need for action to promote rail transport has been apparent in order to better achieve policy goals.

Area for action: infrastructure

In view of the experience gained before the Rail Reform, the federal government and DB initially focused on increasing efficiency in order to reduce economic and budgetary burdens. This reflected the financial objective of the Rail Reform, but led to underinvestment, particularly in the performance and capacity of the rail infrastructure.

It contrasted with the steady growth in rail traffic. Operating performance on the rail network has risen continuously since the Rail Reform. A 29% increase, from 875 million train-path kilometers in 1994 to 1,133 million train-path kilometers in 2022, can be considered a clear success. This came despite a significant reduction in the size of the network, from 77,142 track kilometers in 1994 to 60,999 track kilometers at the end of 2022. The decline of almost 21% was due to the dismantling of underused infrastructure. Meanwhile, there were only minor capacity upgrades in high-demand areas. As a result, the load on the network – especially along the main corridors – has increased considerably. Capacity utilization has risen by over 60% since 1994. This has disproportionately increased the level of mixed traffic, where long-distance, local and freight trains share the same tracks, creating potential for knock-on disruption. In particular, there has been insufficient budgetary funding for the urgently needed segregation of high-speed long-distance traffic as is commonly seen in other countries.

Despite the action taken by the federal government and DB in recent years to increase funding and capital expenditure, the rail infrastructure as a whole remains in a critical condition. It does not provide the quality and capacity needed. For around ten years now, customers, politicians and the industry have been increasingly dissatisfied with the quality of the rail service. DB and the industry have launched multiple programs to stabilize the system: the "round table on construction management," "Zukunft Bahn" program and "Agenda for a better rail service" are prominent examples. However, changes in the system alone have not succeeded in bringing the consequences of the investment backlog and high capacity utilization under control.

Despite the increased funding, the investment backlog in the rail network has increased significantly in recent years, partly due to recent high inflation levels. The backlog currently amounts to around EUR 90 billion – compared with EUR 25 billion ten years ago.

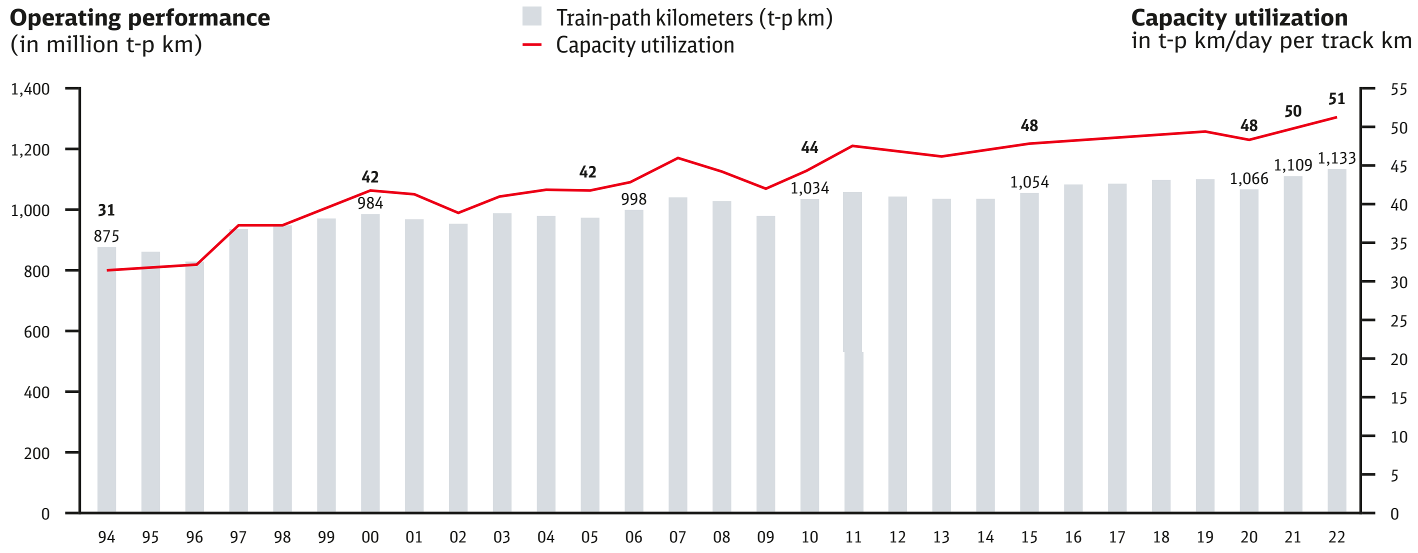
In addition to the insufficient volume of funding, there are also weaknesses in the financing architecture. The main basis for funding provision is the German Federal Railway Infrastructure Development Act (*Bundesschienenwegeausbaugesetz*, "BSWAG") – a law which governs the responsibilities and options of the federal government when it comes to financing infrastructure.

In recent years, the BSWAG has often stood in the way of the rapid and targeted use of funds for rail projects. As a result, some available funding could not be accessed in time, while other projects were delayed because they had not yet cleared all the legal hurdles.

Among the projects that have been seriously affected are station renewals, which also highlight a central flaw in the Rail Reform: the funding rules have created a clear divide between traffic infrastructure and passenger buildings. Adequate funding schemes for passenger buildings are often unavailable, with the result that these are chronically underfunded, especially in rural areas. This policy has prevented the full development and modernization of rail stations in the interests of passengers and an optimal interchange with other modes of transport.

Against this backdrop, the German government has launched a reform package in the form of the public service infrastructure program, which addresses the shortcomings identified. This is explained in more detail in the final section.

Development of operating performance and capacity utilization 1994–2022



Source: DB

A comparison of infrastructure investment and corporate structure across Europe

A comparison with other European countries shows that, despite increased investment in recent years, German infrastructure is still underfunded and has a considerable amount of catching up to do. According to an analysis by the Pro-Rail Alliance, most countries had higher per capita investment than Germany in 2022. Switzerland, for example, invested EUR 450 per capita, around four times as much as Germany (EUR 114). The figures for Austria (EUR 319), Sweden (EUR 245) and the UK (EUR 187) were also significantly higher.

A look at other key figures[1], such as investment per track kilometer, reveals a similar picture. In Germany, this amounted to EUR 155 in 2021, which contrasted with significantly higher figures in Switzerland (EUR 458), the Netherlands (EUR 366) and Austria (EUR 248), for example.

There are also differences in the investment per train-path kilometer. The figure of EUR 8 in Germany in 2021 was far below many European countries, such as Switzerland and Italy (both EUR 18), Sweden (EUR 17), Spain and the Netherlands (both EUR 16) and Austria (EUR 15), though France had a similarly low figure (EUR 7).

Measured against the countries mentioned, the investment level in Germany was 43% below the average.

The reason for the much lower figure in Germany compared with many other countries lies in the high operating performance in Germany, which is also reflected in capacity utilization on the German network. In 2021, this metric was 12% above the average for the countries mentioned. Of the reference countries, only Switzerland (25,600 train-path kilometers per track kilometer) and the Netherlands (22,700) had a higher capacity utilization than Germany (18,200). Austria (16,000), France (15,800) and Italy (13,800) followed. Capacity utilization is particularly low in Sweden (10,900) and Spain (7,700).

The comparatively low level of investment, coupled with high capacity utilization, means that the German network is in poorer condition than that of other countries. This is shown by an indicative comparison of the network condition rating with Austria and Switzerland. The poorer condition of the network in Germany, particularly on busy routes, is detrimental to the operational quality and punctuality of the system as a whole. Both Austria and Switzerland significantly outperformed Germany on these metrics in 2022.

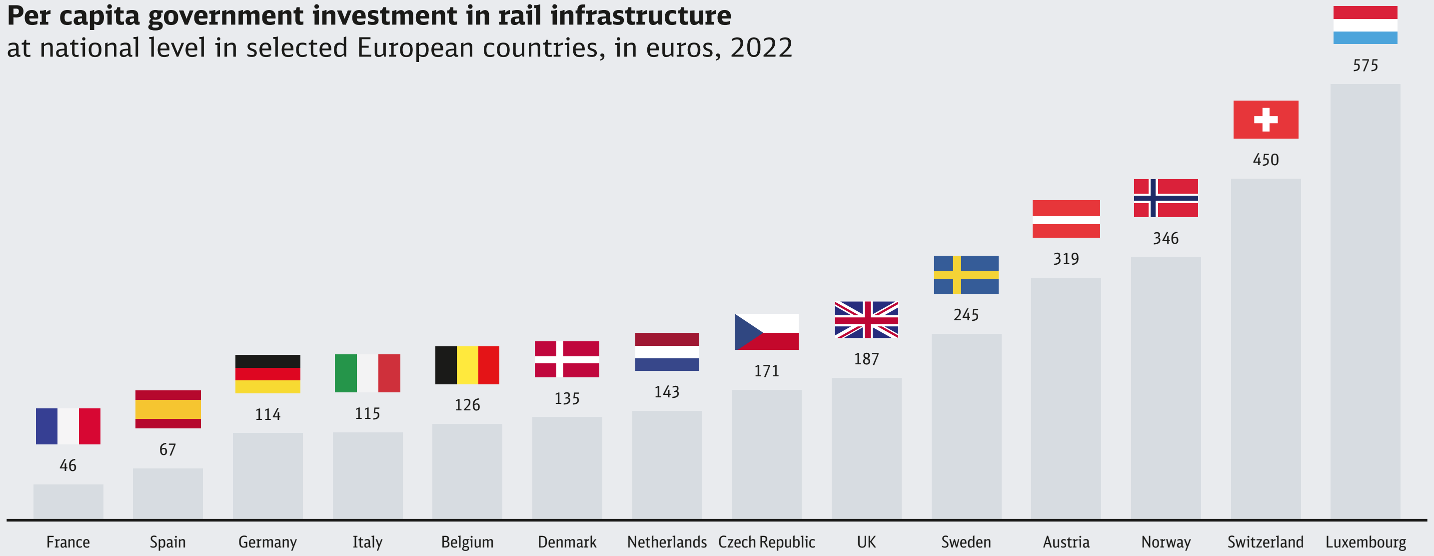
[1] Sources: Pro-Rail Alliance, Eurostat and UIC

The examples of Austria and Switzerland also clearly illustrate that the success of rail is not dependent on separating the rail network from rail operations. On the contrary, there are successful integrated rail systems all around the world, as demonstrated by the examples of Japan and the American freight railroads. Vertically separated rail systems can also work well, as in Sweden, the Netherlands and Spain. Both models have advantages and disadvantages, whose importance may vary depending on market conditions. In Germany, with its heavily utilized and mixed-use network, there are clear advantages to an integrated model.

Within this integrated structure, intensive competition can work well if effective regulation is in place, as the development over the past 30 years emphatically shows.

For this reason, European and national law deliberately permit different structures. The key to sustained improvement of the rail system is the level of investment in high-performing infrastructure.

Per capita government investment in rail infrastructure
at national level in selected European countries, in euros, 2022



Sources: Pro-Rail Alliance, Eurostat and UIC

Area for action: rail transport

Significant growth is required in all modes of transport to achieve the transport policy goals. In addition to better infrastructure, this will crucially rely on net capital expenditure by rail companies and a supportive policy framework. In recent years, the federal government and the rail industry have identified various areas for action with a focus on making rail an attractive and competitive mode of transport. In many cases, action has already begun.

In local rail passenger transport, the federal government has stimulated growth primarily by further increasing federal funding for regional and local transport services in 2016 and 2022 and by introducing the Deutschland-Ticket in May 2023, to which it contributes half the funding. For the future, it will be important to secure funding for the Deutschland-Ticket beyond the commitments agreed to date, which run until 2025. In addition to this action on fares, a service campaign is also necessary to attract further demand.

The federal government has also incentivized growth in long-distance rail passenger transport. In 2020, for example, it cut value added tax on long-distance train tickets to the reduced rate, which already applied to local transport.

The greatest need for action in recent years has been in rail freight transport, which faces intense intermodal competition from road transport in particular. The federal government is using various instruments in its Rail Freight Master Plan to strengthen the competitive position of rail. Key measures include the pro rata reduction in track access charges for rail freight operators since 2018, the grant scheme for rail freight service facility access charges since 2020 and the German federal program to promote pioneering rail freight technology. The federal government is also introducing a support scheme for single freight car transport, which currently runs at a large loss. This represents a paradigm shift in funding policy. With this measure, Germany is following the example of other European countries such as France and Austria and enabling the continued existence of this transport segment, which is elementary to the logistics chains of the German economy.

An increase in productivity, in part by utilizing new technology, is vital for the development of single freight car transport and to making the segment profitable. The introduction of digital automatic coupling will be a key to this. The cost-intensive conversion of existing freight cars in Europe, which is currently scheduled to begin in 2028, requires a coordinated funding framework that has not yet been secured.

Reforms for public service infrastructure

In the 2021 coalition agreement, the current governing coalition committed to significantly strengthening rail transport. It wants to prioritize rail in infrastructure investments and structurally improve the rail system.

The coalition agreement reached between the SPD, Greens and FDP on December 7, 2021 states: “Deutsche Bahn’s infrastructure units (DB Netz, DB Station & Service) will be merged within the Group to form a new, public service-oriented infrastructure division. This unit will be wholly owned by Deutsche Bahn as a Group. Profits from the operation of the infrastructure will remain in the new infrastructure unit in the future.”

The federal government set up a Rail Acceleration Commission to specify the necessary steps. The Commission’s work included input from across the industry. It presented its final report at the end of 2022. This contains comprehensive action recommendations to speed up planning, approval and construction processes in rail transport and to further develop the funding of rail infrastructure.

Many of the recommendations are reflected in the federal government’s reform plan for a public service infrastructure and are already underway. The program comprises five pillars:

The first pillar is the concept and overall program for the new model of infrastructure management, which comprises the following elements: creation of a high-performance network, maintaining and modernization of the extended network, rapid capacity expansion, consistent digitalization, stations of the future, efficient service facilities, line upgrades, new-build lines and electrification. For each element, a vision along with the funding needed to achieve it has been defined with the federal government. Implementing the full program will require an additional EUR 45 billion of funding between now and 2027.

The second pillar comprises creation of the necessary legal framework, particularly to ensure greater flexibility of funding rules through a reform of the BSWAG. This is intended to open up more funding options to the federal government, addressing one-off project-related expenses, maintenance and repair costs, the cost of IT services for the digitalization of the rail system, and station improvements, also considering future transport demand.

The third pillar reorganizes the funding framework. Firstly, based on the recommendations of the Rail Acceleration Commission, the funding architecture is to be modified by simplifying the funding pots. Secondly, the budget legislator will need to provide the necessary additional financial resources to implement the overall program. As a result of the Federal Constitutional Court’s decision on the Climate and Transformation Fund in November 2023, the federal government’s financial framework has changed. DB continues to focus on ensuring that the necessary additional funds are made available.

With the fourth pillar, the federal government intends to more closely align the commercial and financial management of infrastructure with the public service objectives of transport policy. The central component of infrastructure management will be a rolling, multi-year “Infraplan.” The Infraplan will define the infrastructure projects to be implemented, including the vision for their completion and the funding required.

The fifth pillar creates the organizational framework needed to achieve the objectives. As part of this, DB Station&Service AG has been merged with DB Netz AG to form a new company called DB InfraGO AG, which started its work on January 1, 2024.

This new investment and reform program will create the infrastructure required to achieve the transport policy goals, including the implementation of the Germany-wide integrated regular-interval timetable.

In 2024, the elements described above will be worked on further and implemented. This will include:

- Definition of management using the Infraplan, anchored in a long-term guiding strategy
- The design of the new funding architecture, involving further development of the Performance and Financing Agreement, a growth agreement and the examination of fund-based solutions
- The “Modern Rail Act” announced by the federal government
- Organizational integration of DB InfraGO AG within DB and the gearing of processes toward greater effectiveness, speed and efficiency to consistently implement the programs.

The current reform maintains essential and successful elements of the 1994 Rail Reform, such as competition on the rail network and the clear division of responsibility between state and company. At the same time, it is taking action to address the problems visible today, especially with regard to the necessary renovation and modernization of the infrastructure, the funding framework and the desired focus on the public interest and transport policy goals. With consistent implementation of the individual reform steps and sustainable financing of the program components, the current reform will drive the success of strong rail, improving climate protection, quality of life and economic growth in Germany.

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