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# NS Annual Report 2019





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# In Brief

## Summary

### More satisfied passengers in the Netherlands

89% give travelling by train a score of 7 out of 10 (2018: 86%)



### Clean trains: 70% of passengers give a score of 7 out of 10 or higher (2018: 68%)

More trains start services clean



### 92.6% of NS passengers arrived on time in 2019 (2018: 92.6%)

Punctuality remains high despite strong growth in passenger numbers



### 94.9% chance of finding a seat

Slight fall in seat availability, despite trains having maximum length on busiest routes in the autumn (2018: 95.1%)



### Customer satisfaction with HSL South

87% of passengers give a score of 7 out of 10 or higher (2018: 83%)



### Improved railway safety

SPADs in the Netherlands: 38 (2018: 47)



### New Generation Intercity on its way

The first New Generation Intercity trains left the factory in 2019 and will be taken into operation in 2021



### 5.3 million rides by public transport bicycles

(2018: 4.2 million)



### NS Business Card is popular

2019: 10.5% more season ticket holders



### Profit of €215 million

(2018: €116 million)



### Investments of €769 million

(2018: €898 million)



### Revenue of €6,661 million

(2018: €5,926 million)



### 20,074 employees in the Netherlands



### Revenues from Abellio

United Kingdom: €2,919 million

(2018: €2,467 million)

Germany: €534 million

(2018: €357 million)



### Personal safety unchanged at 90%

Extra attention to graffiti



### XL display at Rotterdam CS

The 9.5 x 1.8 m display shows departure times and alternative options during disruptions



### Passengers can tap their own water

Over 200 drinking water fountains at the stations

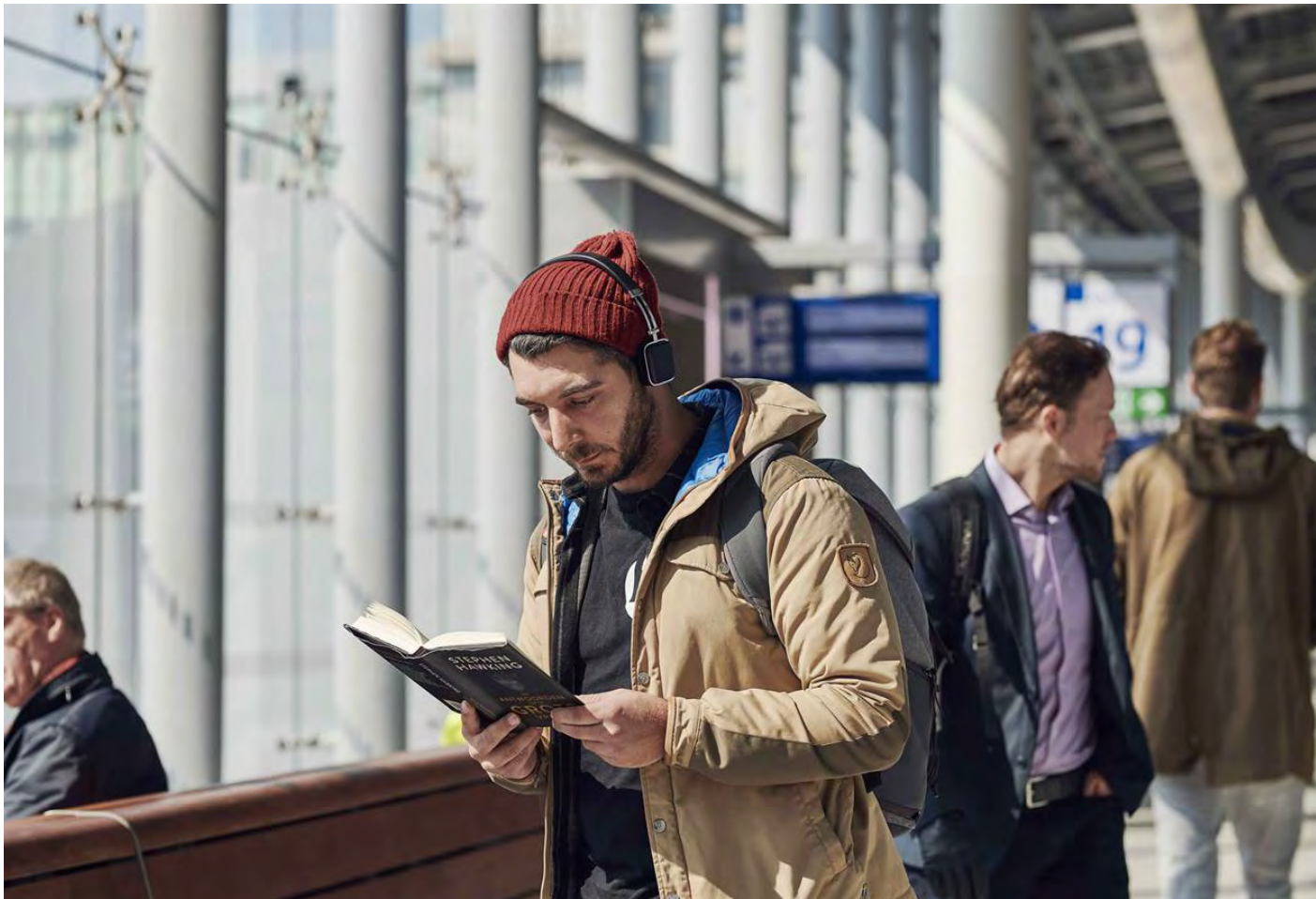


### Reuse of materials

99% of materials in upgraded trains are reused



# 2019 in a nutshell



Rail travel is popular. Passengers are satisfied and their numbers are growing. In 2019, NS managed to continue the good results achieved in 2018. Passenger appreciation for our services continued to rise and we maintained our solid operational performance on the Dutch main rail network. Results on HSL South were mixed, especially in the first part of the year, but recovered as the year progressed. The results achieved over the past year are covered by the midterm review in 2020, when the government will conduct an interim evaluation of our performance during the first half of the franchise period (2015-2019).

## Our performance on the main rail network

Performance	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
General customer satisfaction with the domestic main rail network	89%	86%	74%	80%
General customer satisfaction with HSL South services	87%	83%	68%	73%
Customer satisfaction with personal safety	90%	90%	81%	83%
Punctuality for passengers (to 5 minutes) on the main rail network	92.6%	92.6%	88.9%	91.1%
Punctuality for passengers (to 15 minutes) on the main rail network	97.7%	97.7%	96.7%	97.3%
Punctuality for passengers (to 5 minutes) on HSL South	83.4%	82.5%	82.1%	84.1%
Quality of connections to other carriers	96.0%	95.8%	94.0%	95.6%
Seat availability at peak times (main rail network)	94.9%	95.1%	94.3%	95.5%
Seat availability at peak times (HSL South)	97.1%	94.0%	91.2%	94.9%
Top 10 most crowded trains	2.1%	2.5%	4.9%	4.0%
Journey information during the train journey	85.3%	85.0%	81.4%	83.1%
Information on the train and at stations about delays	84.5%	85.2%	75.0%	80.0%

### The first half of the franchise period (2015-2019) in retrospect

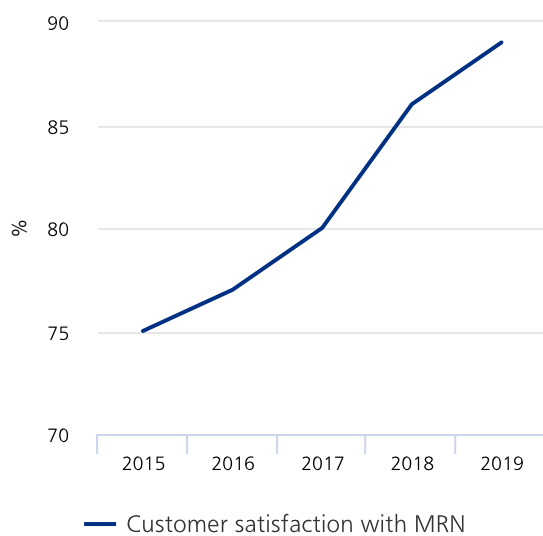
During the first five years of the main rail network franchise, our focus has been primarily on improving operational performance, customer perception of their train journey and more seamless door-to-door travel. Our services have remained firmly centred on our passengers. Thanks to our solid performance and favourable economic conditions, the number of NS passenger-kilometres increased by 3.7% relative to 2018. This is the highest growth rate since 2008. Passenger-kilometres rose by 3.2% on working days and by 6.5% in the weekends. Most of the growth was seen on routes in the Randstad conurbation that were already quite busy. It seems, therefore, that NS has met its target of achieving 1.5% growth on top of overall mobility growth.

In five years, passenger satisfaction has increased from 75% in 2015 to 89% in 2019. Factors contributing to that include enhanced operational performance and improved customer perception of their train journey. For example, punctuality rose from 90.1% in 2015 to 92.6% in 2019, and in 2018 we also launched a high-frequency Intercity service between Eindhoven and Amsterdam, with a train departing every ten minutes. We improved the NS App, offering passengers even more control over their train journeys. To ensure a comfortable journey, we revamped old Sprinter and Intercity trains and purchased new trains, investing a total of €3.8 billion over the period through 2024. Since 2017, all our trains have been running on clean wind power. We renovated 14 stations in collaboration with ProRail, including major stations such as Rotterdam CS, Utrecht CS, Den Haag CS and Delft. Twenty-four stations now feature a so-called StationsHuiskamer, or Station Living Room (+8). The public transport bicycle (OV-fiets) has proved a major success, with the number of rides increasing dramatically from 1.9 million at the start of the franchise to over 5 million in 2019. We are seen as an attractive employer, occupying 5th place on the list of most attractive employers in the Netherlands (2015: 46th).

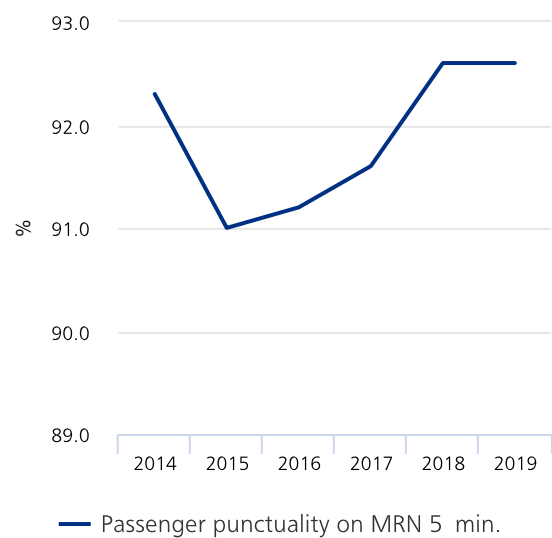
## Achievements in 2019

We have seen very high customer satisfaction levels over 2019. Indeed, general customer satisfaction rose by 3 percentage points to 89%, a record high. Passengers are positive about NS both on the main rail network and on HSL South. Despite strong growth in passenger numbers, seat availability at peak times remained stable around 95% in 2019. From September, however, that figure did come under pressure due to more crowded trains and rising passenger numbers. New Sprinter trains were deployed. More new trains will be brought into operation over the next few years, including the New Generation Intercity trains in 2021. We view the continuing growth in passenger numbers as a positive development, as it means that more and more people are opting for the train as a sustainable mode of travel. Yet the growth in passenger volumes also poses a clear challenge, as we are now approaching the limits of the existing infrastructural capacity, resulting in more crowded trains.

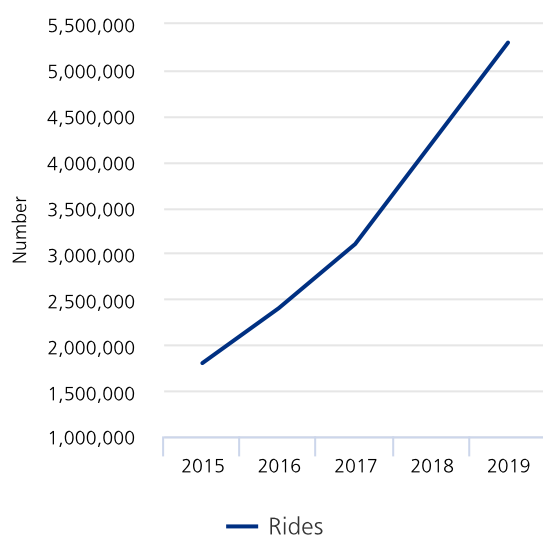
### Customer satisfaction



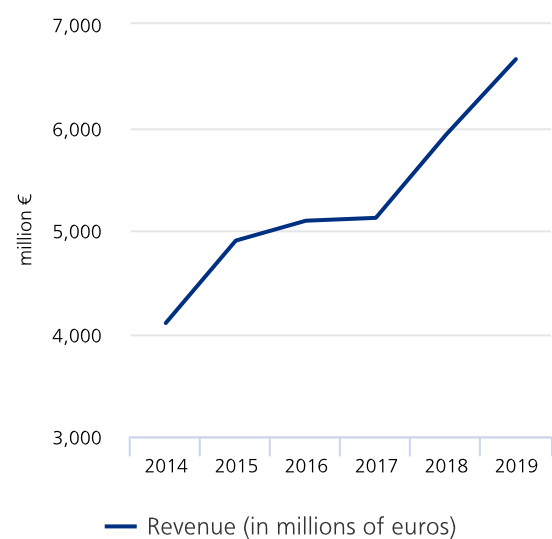
### Punctuality



### OV Fiets



### Revenue





## Abellio

Abellio was founded at the beginning of the millennium in order to help NS prepare for deregulation of the European railway market and help it achieve its objectives in the Netherlands. Abellio's strategy was founded on three central pillars: earn, learn and prepare, while maintaining a proper balance between risk and results. Our purpose for Abellio is to achieve sustainable financial results and offer reliable services to our passengers. Dutch passengers should eventually be able to benefit from our operations abroad, for example in the form of cross-border transport services. 2019 saw the launch of the Stuttgarter Netz, Ruhr-Sieg Netz 2 and S-Bahn Rhein-Ruhr franchises in Germany, while in the United Kingdom we commenced our East Midlands franchise. The fourth-largest rail transport company both in the United Kingdom and in Germany, Abellio posted EBIT of €55 million and a net profit attributable to NS of €4 million. Abellio's operations in the UK turn a profit, but circumstances remain difficult. The situation on the German market deteriorated as a result of external factors with a negative impact on our results. Combined with the costs of mobilising new contracts, those circumstances resulted in a net loss of our German operations in 2019.

## Finance

It is crucial for NS to stay financially healthy in the future if train fares are to remain affordable and if we are to continue financing the investments required to absorb the expected growth in passenger numbers. Urgent as they are, investments will have to pay for themselves in the end. This is why NS strives to achieve solid financial results as a logical outcome of good operational performance and satisfied customers. NS can look back on a healthy year in financial terms. We recorded revenues of €6,661 million, up 12.4%, much of which was generated abroad. NS made investments totalling €769 million. The main rail network franchise KPIs for 2020 are also determining factors in the financial policy for the NS business plan. For example, we are continuing to invest in programmes that will help us achieve the KPIs, as well as in customer satisfaction, new rolling stock and IT systems.

## Our impact

In 2019, passengers travelled over 361 million more kilometres by train compared with 2018. This means that we have further improved our positive social impact on mobility and safe travel compared with private cars. The negative impact due to travel time has also increased as a result. Since rail passengers get more exercise, we have also, since 2018, calculated our positive social impact on health. That impact increased last year. Our environmental impact increased thanks in particular to the rise in the number of passengers. The positive impact of expenditure and education was greater because NS had a larger workforce. A new calculation method for occupational safety could not be used for previous years, so comparison is not possible.

## NS in 2020 and beyond

Our figures clearly reflect the significant role and contribution of NS as a provider of stations, trains and door-to-door travel facilities. Going forward, our aim is to maintain our high level of performance and, where possible, achieve further growth and quality improvements. One challenge, however, is that due to the sharp rise in passenger numbers in recent years, we are now approaching the capacity limits of our infrastructure. In the years ahead we aim to accommodate further growth in passenger numbers by offering higher frequencies, more trains and longer trains. To that end, we will continue on the path towards smart innovations and collaboration with our partners. In addition, we will continue making targeted investments in rolling stock and mobility.

# Our contributions to Dutch society

As a provider of sustainable mobility, NS is committed each and every day to making Dutch society healthier and more sustainable. This year, the Dutch government will assess NS's performance over the first half of the current franchise period (2015-2024). The focus of that assessment will be on the performance of NS on the KPIs for the main rail network and the high-speed line (HSL South). The agreed targets for 2020 have been achieved, and passengers stand to benefit from that.

Operationally speaking we are clearly moving in the right direction, although there will always remain room for improvement. Due to the scale of our operations, we have an impact on the Netherlands as a whole, both in a positive and a negative sense. [For years we have used our impact model to explain that impact.](#) This year, however, we will also highlight a number of specific elements to show the various other ways in which we contribute to Dutch society and how we strive to reduce our negative impact. To that end, we will place several of our achievements of recent years in a broader (nationwide) perspective and provide more detailed insight into our contributions to Dutch society. We do so by providing a holistic view of our operations and of the mobility sector at large: how do we contribute to mobility in the Netherlands and how does this impact on the Dutch economy, on employment and on the environment?

## The contribution of mobility to the Dutch knowledge economy

NS is the largest provider of mobility services in the Netherlands, with 10.7 million unique passengers every year. Given the total population of around 17.3 million, this means that approximately 62% of all people in the Netherlands use our services on a yearly basis. Between 2010 and 2017, NS's market share in overall mobility in the Netherlands increased from 9.1% to 10.1% - despite the discontinuation of several decentralised train services.

Next to its positive impact, rail travel obviously also has negative effects on society, for example in the form of delays and of passengers unable to find a seat and unable to spend their time in the way they wish. NS is working to alleviate these issues, by raising the level of comfort in both our existing and new train sets. For example, we are installing on-board charging points, upgrading Wi-Fi connections and increasing the number of seats on our trains. In this way we enable passengers to put the time they spend on our trains to good use by working, studying or relaxing. We also apply this approach to the time passengers spend in our stations, for example by opening Station Living Rooms (StationsHuiskamers).

NS transports approximately 750,000 unique passengers (on 1.3 million train journeys) every day, including approximately 280,000 commuters or business passengers and 240,000 students who take the train on a daily basis to get to their place of work or study.

Every single euro earned in the Dutch railway sector generates an additional €0.90 worldwide. On a national Dutch scale, this works out at €0.55 per euro earned in the Dutch railway sector. So, with revenues in the Netherlands of approximately €3.2 billion in 2019, NS's indirect contribution to the Dutch economy amounts roughly to €1.8 billion in additionally generated funds.

**1.3 million  
train  
journeys  
per day**

**1 in 300**  
jobs  
affiliated  
to NS

## How we contribute to employment in the Netherlands

NS is one of the largest employers in the Netherlands. Every day, our 20,074 employees (17,742 FTEs) work hard to provide door-to-door journeys throughout the Netherlands, which puts NS in 11th place on the list of the largest employers in the Netherlands. NS is larger, for example, than ABN-AMRO or KPN – but smaller than PostNL or Ahold. Each job created in the Dutch railway sector generates 0.38 jobs elsewhere in the Netherlands and 0.54 jobs globally. This means that the 20,074 jobs at NS generate an additional 7,600 jobs, or thereabouts, in the country as a whole. In other words, approximately 1 in every 300 jobs in the Netherlands is related to the activities of NS either directly or indirectly.

## The added value of a railway station for the local community

The Netherlands is facing a huge housing construction challenge in the next two decades. Over the 2018-2030 period, the total population is projected to increase by around 1.3 million to 18.5 million people. In addition, housing construction does not seem to have really taken off yet. The combination of slow construction and growing demand will cause the housing shortage to rise, especially in regions already in the top 10 of traffic congestion where accessibility and liveability are under serious pressure. For this reason, we intend to move towards more efficient utilisation of the available space in station areas through densification, an approach that is already being applied in the so-called Cartesius triangle near Utrecht CS and in the Nieuwe Kern near Duivendrecht station. In collaboration with our partners, we are also examining options for using the space above the railway tracks, for example by adding office space. The first declarations of intent for construction over the tracks have already been signed, for Utrecht CS and Amsterdam Sloterdijk. A study by CPB Netherlands Bureau for Policy Analysis has shown that the value of houses and offices in station environments is up to 25% and 18% higher, respectively, than elsewhere. Even so, local residents in these areas may of course also experience negative effects, such as noise nuisance or inconvenience caused by works at and around the station. We accept the challenge of minimising those effects as much as possible.

Houses at  
stations worth  
**25%**  
more

**100%**  
wind energy

## Our contribution to sustainability in the Netherlands

We believe that we, and our partners in the mobility sector, have a major role to play in the efforts to make the Netherlands more sustainable. That is why we have launched several initiatives and taken multiple measures in recent years to reduce our own emissions and those of our partners. For example, we initiated the 'Anders Reizen' coalition in collaboration with our partners and signed the government's Climate Agreement and the Plastic Pact.

NS is also one of the largest consumers of energy in the Netherlands. We try to reduce our energy consumption every year and make sure to obtain as much of the energy we use as possible from renewable sources. We use electricity, diesel, heat and gas for our trains, buses, stations, workshops and offices. We use 1,433 GWh of energy in total, of which 1,420 GWh is renewable energy. As such, the consumption of renewable energy by NS equalled approximately 3.2% of the total consumption of renewable energy in the Netherlands in 2018.

Electricity is the most important source of energy for NS. In total, we consume 1,346 GWh of electricity, an amount comparable with that of a city the size of Amsterdam. In order to reduce our environmental impact, we entered into a new electricity contract with Eneco in 2017 that enabled us to make all our electric trains run on 100% wind power. As a result, rail travel is now fully climate neutral. The consumption of renewable electricity by NS equalled approximately 7.5% of the total consumption of renewable electricity in the Netherlands in 2018.

# Foreword by the CEO

The Netherlands is facing a far-reaching climate and energy transition and several major challenges in the fields of housing construction and increasing mobility. NS is able and indeed wishes to make a fundamental and sustainable contribution to that transition, in collaboration with its partners. Over the next few years, we hope to realise a range of ambitions to make travelling by public transport even more attractive and facilitate the projected substantial increase in passenger numbers. We have made good progress so far. By the end of 2019, NS reached the midpoint of its 10-year franchise period for the main rail network. We are proud to have achieved all the agreed results thanks to the commitment of all our people, and to see that our passengers recognise and appreciate those results.

NS holds a franchise for the main rail network that covers the period from 2015 up to and including 2024. As agreed, the franchise authority - the Ministry of Infrastructure and Water Management - will evaluate our performance in the midterm review. The focus will be on aspects such as customer satisfaction, punctuality, personal safety and seat availability. This is clearly an important moment for NS, so we are happy to say that thanks to the efforts of all the people at NS and the contributions of our partners, we have been able to achieve all the objectives agreed with the Ministry. We are also, and especially, happy on behalf of our customers, since these results mean that they like travelling with us, are usually able to find a seat and arrive on time to get to their destination or catch a connection train. We expect that those politically responsible for NS will review our results on the main rail network in the spring of 2020. Given our positive performance, we look forward to that review with confidence. That is not to say that we have 'reached our final destination'. Some targets demand our constant attention, such as the issue of punctuality on HSL South, and seat availability. Given the expected growth in passenger numbers, we will need to continue making every effort in the years ahead to maintain our performance at its current high level.

Through our renewed strategy, 'Keeping the Netherlands accessible in a sustainable manner - for everyone', we provide solutions to new issues, set the course for the most significant mobility challenges the Netherlands is facing and show what is needed to realise our ambitions. The strategy centres around a strong and dynamic network in the Netherlands that firmly interconnects the stations and the main rail network, including the high-speed line. This will provide passengers with the broadest possible range of mobility options, and ensure smooth and seamless travel between the international, domestic, urban and regional domains.

## Contribution to the Netherlands

In recent years, NS has shown that its contribution to Dutch society is significant - not just in terms of our actual results on the main rail network, but also more generally as a provider of mobility services. Indeed, we often make an extra effort, for example by running more trains than we are contractually required to do, or by deploying additional trains during major events such as important soccer matches or festivals such as Pinkpop. We train our own drivers and guards, and in our own TechniekFabriek we transform vocational education graduates into full-fledged mechanics. Our connections with Dutch society are inextricable, we contribute views on tackling the challenges facing the country and help strengthen its economy. Of course we offer employment to our own people, but we also generate indirect employment at our suppliers.

## Improvements for passengers

More and more people are travelling by train, and NS keeps making it ever more attractive for them to do so. For instance, since 2018 our passengers have been able to use the NS Flex 'travelling on account' option, which already has over 100,000 regular users. NS Flex offers an ever-expanding range of functionalities, including the possibility to activate joint journey discounts (*samenreiskorting*) in the app and apply for NS Flex for children. In 2019, we announced our intention to make NS season tickets more flexible and more straightforward. NS Flex will become the standard option for most season tickets, and we will streamline our range of season tickets overall. To increase seat availability on our trains at peak times, NS has decided to terminate the 40% discount for passengers during the afternoon peak with effect from 2021. At the same time we will make travel during off-peak hours more affordable and hence more attractive to passengers. And we are taking further measures to improve seat availability. For example, we have expanded the Zitplaatszoeker (seat searcher) functionality, adding further routes where it shows how full each carriage is. We are also investing billions of euros in new rolling stock over the period until 2024. The first New Generation Intercity trains are scheduled to appear on the track from the end of 2021.

## Innovations

We have produced various innovations to help us further improve rail travel in the future. In the NS Lab App, for example, passengers join us in exploring possibilities for digital journey support in the future, with a special focus on step-by-step guidance in the travel process. The tool enables passengers to see at a glance how many minutes they have left to catch their train, and when and where they will have to change trains. In 2019, we ran the first experiment to find out whether automatic train operation (ATO) could contribute to better rail capacity utilisation, less energy consumption and higher levels of comfort, flexibility, safety and customer satisfaction. The experiment was successful and has proved an important first step. We are learning from it and gaining experience in terms of the potential contribution of ATO for NS. We have partnered with Ahold, ING, KLM and Philips to promote and accelerate the use of artificial intelligence (AI) in the Netherlands and retain talented AI experts.

## At and around the stations

Stations are developing into hubs for all public transport passengers and are contributing to quality of life and spatial development in our cities. Our stations add value to our network and to our passengers' journeys. As such, they are an inseparable part of NS. The more passengers appreciate their stay and the facilities at the railway station, the more satisfied they are with the entire journey. In February 2019, we announced our plan to upgrade 200 railway stations, both large and small. Facilities such as toilets, hot drinks outlets and pleasant waiting areas are crucial. In 2019, we created a Station Living Room at 8 stations, bringing the total to 24. We are also renovating the sanitary facilities at smaller stations in collaboration with ProRail.

The station also serves as a crucial link in the overall door-to-door journey; it is the place where bicycles, cars and public transport facilities all come together. This calls for sufficient space and proper coordination with all the other parties at and around our stations. Bicycles play a prominent role in what we call 'the first and last mile': passenger transport to and from the station. In 2019, the municipality of Utrecht, ProRail and NS Stations opened one of the world's largest bicycle parking facilities at Utrecht CS, which can accommodate 12,500 private bicycles and 1,000 public transport bicycles. The public transport bicycle remained invariably popular, with approximately 5 million rides from nearly 300 different rental locations in 2019.

In our view, development efforts should not focus only on the station itself, but also on the surrounding area. Station environments offer space for passengers and the infrastructure for the first and last mile of their journeys, but they also accommodate urban functions such as

homes, companies, leisure facilities and education. Last year saw the official opening of Heerlen station after a seven-year renovation project. This was part of a complete make-over of the station area, with the Maankwartier district now offering a highly attractive urban combination of homes, businesses and shops. Other station districts (for example Roosendaal, Zwolle and Den Haag HS) are also scheduled for redevelopment. NS aims to use every possibility to build over the railway tracks, in order to alleviate the shortage of urban space while also creating accessible residential areas near the railway stations. In July, NS signed declarations of intent with the partners involved for Utrecht CS and Amsterdam Sloterdijk.

## Sustainable travel

By switching to 100% green power for all its trains in recent years, NS has made a leap forward in its endeavours to make its operational processes more sustainable. The next move is to achieve 100% circularity for NS as a company. And we are making good progress: for example, 99% of the materials of old trains are now reused in other trains or for other purposes.

In another area, NS is contributing to a sustainable society by encouraging international train travel, also as an alternative to flights over distances of up to 700 kilometres. This is a field that offers huge opportunities, and the aviation industry itself is now also becoming aware of them. For example, from late March 2020 KLM will replace one daily flight between Schiphol Airport and Brussels by seats on the Thalys high-speed train. We interpret this as a promising first step, and look forward to partnering with KLM in the development of a 'plane to train' transition that feels entirely logical for passengers. Since last June we have operated a third daily Eurostar service to London, with NS International registering record sales over the summer period. Effective 30 April 2020, we will also offer a direct service from Amsterdam to London. From then on, passengers will no longer have to change at Brussels.

## Safe journey

We attach great importance to the safety of train travel, on behalf of both our passengers and our employees. We have taken various measures to improve personal safety and railway safety. Our results in both these areas for 2019 were better than in 2018. However, the year was not entirely incident-free. Examples include the shooting of an Intercity train in the province of Noord-Brabant and harassment of our colleagues on the IC Brussels. Such incidents are unacceptable, and we expect our partners in the safety chain and politicians to join us in sending a firm signal: intimidation of our people will not be tolerated.

We regret to say that further incidents occurred at the beginning of 2020. A woman was killed in a fatal accident involving an NS bus in Bussum. Our thoughts are with the victim's relatives. In another incident in The Hague a train derailed, and a train guard sustained minor injuries. We are now investigating the cause of this incident in collaboration with the Human Environment and Transport Inspectorate (ILT) and the Dutch Safety Board.

## Individual compensation for victims of WWII transports

During the Second World War, NS operated trains on instructions from the occupying forces. This is a black page in the history of our country and our company. A special committee chaired by Job Cohen has been tasked with handling individual compensation on moral grounds to an as yet undefined group of survivors and their direct descendants. The committee started work in January 2019 and has issued the following recommendation: 'Jews, Roma and Sinti who, during the Second World War and on the occupiers' instruction, were transported by NS by train to Westerbork, Vught or Amersfoort or to other locations in the Netherlands - for further transport to concentration or extermination camps with the aim of exterminating them as a population group - are eligible for individual financial

compensation. Upon their death, this also applies to their direct descendants.' NS has decided to follow the committee's recommendation, and is now implementing it. The committee received a total of 5,800 applications and is carefully examining them all. By late December, 3,800 applications had been assessed, of which 3,314 have been honoured. NS created a provision of €47 million for this scheme in 2019.

The committee has also recommended that NS initiate a historical study into its role in the transports during the Second World War. In view of the fact that similar studies have already been conducted, with NS's cooperation, we are considering the extent to which further study might yield new insights. In addition, the committee advised NS to consider possibilities for a collective expression of recognition for the large group of transported people who no longer have any descendants to claim individual compensation. Over the past decades, NS - often in conjunction with organisations of war victims - has on several occasions commemorated, honoured and learned lessons from the misery inflicted on so many people during the Second World War. NS regards the committee's advice as an encouragement to continue that policy.

## Our operations abroad

NS subsidiary Abellio runs trains in the United Kingdom and Germany. The situation on the UK railway market is tense. Many passengers are unhappy with the railway system in general and with railway fares in particular. On top of that, in 2018 the UK Department for Transport launched the Williams Review into the current and future structure of the British rail industry and passenger transport. Transport Scotland (TS) and Abellio will not renew the current ScotRail franchise after its expiry in March 2022. Abellio and TS failed to reach agreement on the conditions for extending the franchise from seven to ten years, which prompted TS to activate the dissolution clause in the franchise agreement. Abellio was only prepared to renew the contract if cost-effectiveness improved.

In Germany, Abellio was confronted with external developments that adversely affected its ability to provide railway services. For example, a new CLA has resulted in higher costs, and extensive railway maintenance and repair works have caused punctuality figures to slide. This is why Abellio Germany now seeks to amend the agreements with clients, in consultation with the other carriers, in order to ensure continued effective implementation of the franchises. If these talks remain unproductive, we will reconsider our operations in Germany. Our experiences in the United Kingdom and Germany clearly strengthen our plea to leave the current railway structure in the Netherlands unchanged.

## Finance

In 2019, as in previous years, NS closed the financial year with positive financial results. NS has seen its results improve on the back of enhanced operational performance, which is thanks in part to better integration of the various NS business units and better management. NS aims to further improve its financial results, which will enable us to finance our investment plans and keep railway fares affordable, as reflected, for example, in the attractive propositions for off-peak travel we announced in 2019.

## Looking ahead

The Netherlands is facing several major challenges: climate change, urbanisation and increasing demand for mobility in the Randstad conurbation and beyond, economic shrinkage in several regions and a formidable housing construction task. NS is able and indeed wishes to play a leading role in tackling these nationwide challenges. The Mobility Alliance enabled us to create a truly ambitious plan (the Delta Plan) in 2019 to do just that. As a home carrier, NS will be able to make a major contribution to that alliance. At the same time, the regulation of the railway sector will be discussed in parliament this spring. The debates will focus on the high-speed line, market forces on the main rail



network, the position of the railway stations and removing a number of lines from the main rail network. It remains to be seen, however, which of these changes will truly contribute to improving the product for rail passengers. After all, what they want in particular is for the government to commit itself to improving accessibility and quality of life in the Netherlands. One crucial condition for that is an integrated network in which stations, trains of all carriers, and all regions remain firmly interconnected.

This calls for urgent investments. If we are to safeguard accessibility and quality of life in the Netherlands in the years ahead, we will need to invest an estimated €3 billion annually until 2040. According to the Mobility Alliance, these investments are more than offset by societal benefits in the amount of €18 billion per annum. In other words, the annual yields are expected to be six times as high as the additional annual investment required.

NS itself is also investing, including €3.8 billion in new trains. 2021 will see the introduction of the New Generation Intercity trains on the Dutch railway network, which will carry passengers on the high-speed line at 200 kilometres an hour. NS is also planning to start direct train services in 2023 from Breda and Rotterdam, via Amsterdam-Zuid, to Zwolle, Leeuwarden, Assen and Groningen in the north. This marks a first and important step towards the ambition of reducing travelling time between the Randstad conurbation and the north of the country using a fast train connection.

## Efforts by our staff

NS is an inclusive and diverse organisation. We believe it is important to offer an environment where everybody feels at home and is able to perform their tasks safely, and where passengers can travel safely. The fact that we managed to attain the franchise KPIs is due to a large extent to the commitment of all NS employees - from the driver on the train to his or her colleague in the Station Living Room, and from the mechanic who helps minimise disruption due to repairs to IT specialists that keep our software running and up to date, allowing us to run more trains on the tracks. All these professionals are there to serve our customers, each and every day - for our regular services but also when an extra effort is needed, such as during the Nijmegen Four Days March, major soccer matches or the Pinkpop festival. We are proud of that. Over the past five years NS has made enormous progress in various respects, but it would never have been able to do so without the flexibility and confidence of all our colleagues. As a company we have shown considerable resilience, cooperation and results-oriented drive. In the year ahead, the commitment, flexibility and expertise of all our people will remain crucial.

In 2019 we said goodbye to Susi Zijdeveld (May 2019) in the Executive Board and to Paul Rosenmöller (July 2019) and Jeroen Kremers (January 2020) in the Supervisory Board. We would like to take this opportunity to thank them for their commitment to NS and to our employees. We are happy to welcome Anneke de Vries to the Executive Board and Nebahat Albayrak and Herman Dijkhuizen as new members of the Supervisory Board, and wish them every success.

I and my fellow Executive Board members would like to thank all our colleagues at NS and our partners. I am also grateful to the employee participation bodies for their involvement and cooperative attitude. We are all united in serving the interests of this great company. Finally, we would like to express our gratitude to the Supervisory Board and our shareholder for their huge efforts and dedication in 2019 and for the trust that they have shown in us.

Roger van Boxtel, Chair and CEO of NS



*Rotterdam Centraal  
is in Central Rotterdam  
A place where everyone departs  
and in a while returns.  
Stations are like harbours  
for our wandering souls  
Places where 'there' begins  
and where 'here' ends.*

Jules Deelder (1944-2019)

Following the poet's death, NS projected the original Dutch version of this poem on a large screen at Rotterdam CS.

# Our strategy



Our product and the associated achievements are built on foundations incorporating over 180 years of knowledge and experience. Over the past few years, we have made considerable steps forward with all our NS colleagues and our external partners and stakeholders. Our passengers recognise and appreciate that.

We launched our 'Spoorslags Beter' ('On Track for Improvement') strategy for 2014-2019 to focus on what is needed to further improve the passenger experience. Over the past years, our performance on the main rail network has improved and we have met all performance agreements made with the government. Punctuality for passengers has increased, and they have a better chance of finding a seat at peak times compared with the situation at the start of 'On Track for Improvement'. More trains are running, including Intercity trains every ten minutes between Amsterdam and Eindhoven, the Intercity Brussels on HSL South and the Eurostar to London. The good results translate into higher customer satisfaction. To achieve all this, over the past five years, as part of 'On Track for Improvement' we have invested in new trains and upgrading trains, better journey information, a sharper focus on operational processes, new methods of payment and further improvements to stations. We have already made several considerable steps forward, and now the time has come for the next one. Mobility growth looks set to continue, and it is crucial for us to keep facilitating that. Over the coming years, our financial result will need to improve so that we can realise and finance our plans for the future.

We are continuing the course that we launched under 'On Track for Improvement' in our renewed strategy: 'Keeping the Netherlands accessible in a sustainable manner - for everyone.' However, the moment has come for us to take the next leap. The renewed strategy is designed to help solve wide-ranging mobility issues and tackle several major challenges the Netherlands is facing. It also shows what is needed to realise our ambitions, first of all at NS itself.

Based on the shared vision that we formulated in 2018, in 2019 we determined the strategic choices for NS for the 2020-2025 period and decided how we are going to realise our ambitions. The renewed NS strategy for 2020-2025 has been formulated in close consultation with NS's Central Works Council (COR). The COR and NS remain in disagreement however on a single point. The COR recommends that the company provide job security throughout the period covered by the strategy and has asked the Netherlands Enterprise Court to render a verdict on this issue.

In addition, NS has sought support for its strategy from our shareholder and the franchise authority. Our shareholder has since issued a letter expressing its positive opinion.

## **The mission and vision for the future for NS**

To ensure that the Netherlands remains sustainably accessible, over the past two years we put major efforts into finding connections within NS and beyond in order to shape our new vision and renewed strategy for the future. Every new vision stands on the shoulders of its predecessors; that also applies to NS. This enables us to ensure continuity, while also allowing us to keep moving with the times.

'Keeping the Netherlands accessible in a sustainable manner – for everyone.' That is our mission. Especially because the transport system is going to be even more crowded in future, with people wanting to travel more and wanting their journeys to be greener. In addition, we are proactively working to contribute to the economic and spatial development of the Netherlands. We have a clear aim: to be delivering world-class mobility by 2025. Always close by, always affordable and always sustainable.

To keep the Netherlands accessible in the future, we have set our sights on a broader concept of mobility: we are looking beyond rail and at better connections with other modalities. The focal point for this is the ever-changing wishes of the various groups of passengers. Passengers in different parts of the country: urban regions, rural regions and border areas. Passengers who will increasingly require digital as well as physical improvements. We play an active part in the development and implementation of mobility solutions in an integrated network.

## **Our vision**

Our vision was born from the wish to offer solutions for the transport challenges that the Netherlands is facing. That vision for the future of NS and for our role in the Dutch mobility sector was conceived in part on the basis of a broad dialogue, and serves as the foundation of our strategy. Travelling where and whenever you wish, in a manner that suits you best and with maximum comfort – we want this to be a reality for every person in the Netherlands. So our mission is also to serve all of the Netherlands: the Randstad, every other region and connections to other countries. The train alone cannot deliver that degree of mobility, so we also aspire to be involved in other modes of transport used by our passengers, including the 'first and last mile', covering the entire door-to-door journey. What we aim to offer all passengers is optimised accessibility – including for passengers with a disability and for the next generation. This is why we operate as sustainably as possible. We sense and gladly accept our social responsibility to contribute to the economic and spatial development of the Netherlands.

To achieve all that, we need our partners; collaboration is the key to success. So we are joining forces with ProRail, our franchising authority, our stakeholders, other carriers and partners. Internally we also operate as a single, united NS. All colleagues cooperate effectively both within and among the various business units, covering the entire internal chain.

## **We and our partners deliver world-class mobility with a sense of responsibility towards our local environment**

The key pillars of our success:

### ***Always nearby***

We provide the fastest and smoothest connections to, from and within the Netherlands for all passengers, demand-driven and flexible, with the stations serving as vibrant hubs in the network. We serve regional, domestic and international passengers alike. We also focus on the 'first and last mile' of the door-to-door journey, offering a multi-modal range of services through the best mobility app in the Netherlands that always provides the ideal solution.

### ***Always affordable***

Our passengers are satisfied with the price-quality ratio of travelling with NS. The way we run our business results in cost-efficient and attractive operations.

### ***Always sustainable***

NS is an engine of urban and economic development. As leaders in sustainable mobility, we willingly take on responsibility for facilitating and realising it in cooperation with partners.

## **Strategic priorities for 2020-2024 and beyond**

Our intention is to ensure that our passengers remain as happy with our performance as they are now. In recent years, our performance scores on the most important indicators have confirmed that we are on the right track. The economy is doing well, the number of public transport passengers is growing, urbanisation is gathering momentum and it is getting busier and busier on the country's roads and railways. We are also seeing more and more work on the railway system to ensure that it remains available at full capacity. Due to this combination of growing passenger volumes (especially at peak hours) and limited availability of infrastructure, we are facing a particularly tough challenge in the period ahead. At the same time we are transitioning towards a 100% sustainable, demand-driven and multi-modal public transport and mobility network. To complete that transition, we need to embrace the developments that are taking place in our environment, in terms of technical progress, the digital mindset of our colleagues and new technologies. It is imperative that we act now if we are to accommodate the growth in public transport passengers in the years up to 2040 and improve railway capacity utilisation.

Our range of services centres around a strong and resilient network in the Netherlands: one in which the stations are firmly integrated into the railway network, and a network that both follows and influences the development of spatial planning in this country. Rail travel is and will remain the backbone of our operations, but we are also consciously looking ahead. After all, passengers have to make the full door-to-door journey and arrange all the various stages: planning and booking the trip, travelling to the station, changing trains at another station, travelling on the train, moving on to their final destination – and finding alternatives when the train is not a suitable option.

By linking all these stages in a seamless chain, we can give every individual passenger a convenient and comfortable experience, offering multiple options and solutions. A person from Eindhoven may have different travel needs than somebody from, say, Bovenkarspel. In the Randstad conurbation there is a need for many and frequent transport services, including direct intercity connections and custom transport options outside the cities. NS is able and willing to provide those connections and combat the current fragmentation of transport facilities. Indeed, the best solution requires that we approach the entire Dutch network as a single entity. In doing so, we join forces with other parties so as to be able to provide the best options for our passengers across the country. This will eventually ensure smooth and seamless travel between the international, national, urban and regional domains.

We are also introducing concrete improvements for passengers, such as water and toilets at the stations and further development of the NS App, building on the 'On Track for Improvement' strategy.

The implementation of other strategic priorities, such as custom services in regional transport, begins with listening to the responsible authorities and registering their needs and wishes, and setting to work with our partners.

Some of those strategic priorities concern our objectives for the medium and longer term, which is the time frame, for instance, for many of the envisaged developments on the rail network. While we will also make improvements, where possible, to our timetable for passengers next year, our strategy focuses rather on clearly defining the improvements to our service range for the period beyond 2025 and on formulating the preconditions required for that, such as increasing the capacity of the available infrastructure and the deployment of new trains. For extensive information about the course of NS over the coming years, visit [www.ns.nl](http://www.ns.nl).

## Strategy scope

This strategy focuses on NS's ambitions in the Netherlands, in detailed plans for the period up to 2025 and in outline for the subsequent period. Abellio was originally founded to help NS in preparation for deregulation of the European railway market and achieve its objectives in the Netherlands. Abellio's strategy was founded on three central pillars: earn, learn and prepare, while maintaining a proper balance between risk and results. Dutch passengers should eventually be able to benefit from our operations abroad. Abellio's strategic priority is to generate solid and sustainable financial results and provide reliable services for our passengers. We do so through a diversified portfolio to ensure effective risk control and keep investments at an acceptable level, as agreed with our shareholder, the Dutch Ministry of Finance.

## How NS adds value to society

Each year, NS provides sustainable mobility to 10.7 million passengers in the Netherlands. In doing so, we contribute to the accessibility and economic development of cities and regions, and to achieving the Dutch climate goals. Our annual report tells you about the ways we are creating value for Dutch society. The value creation model below shows the social, economic and environmental resources we use, the value NS adds to them and the resulting yields for society.

# How NS adds value to society



## Business model

The main foundation of the value creation model is our business model. In our current 'On Track for Improvement' strategy, the focus is on 'passengers, passengers and passengers'. In addition, it is our objective to improve sustainable mobility in the Netherlands while at the same time running sound business operations. NS focuses on three core tasks: facilitating high-quality train journeys, providing world-class stations and improving our passengers' door-to-door journeys by giving them control over their own journeys. This is our contribution to affordable and sustainable mobility in the Netherlands.

## Input

To make our business model function as effectively as possible, we need several key inputs, including people and technology. As a carrier, we could not for instance function without our people and their knowledge of logistics. But other aspects are important too, such as energy (e.g. from wind) for powering our trains.

## Output

The activities in our business model have a variety of internal and external outcomes. In addition to our financial results, for instance, we provide an average of 1.3 million train journeys a day. We have high employee satisfaction scores and most of our trains run on time.

## Our impact

Our impact on our environment is considerable, given the fact that mobility generates huge socio-economic benefits for the Netherlands. At the same time, however, we also have a considerable ecological footprint, as we use space and natural resources. Delays result in extra travel time for passengers. If we are to continue facilitating travel in future and keep the Netherlands mobile, it is important for us to understand the effects of our business model on society and to keep using that knowledge as a control parameter. We know, for instance, that the social costs of a train journey remain less than those of a car journey. Where the environment or safety are involved, we will be able to improve our social return by increasing our share in overall mobility growth.



# The profile of NS



People want to be able to travel quickly, safely, conveniently and at any time. NS is helping to make that possible. We provide a broad range of services that go beyond just the train. Our activities are always centred on our passengers. We work to provide them with comfortable, easily accessible and efficient journeys from door to door, based on timely and up-to-date information.

Every day, our more than 39,000 colleagues (36,700 FTEs at the end of 2019) in the Netherlands and abroad work hard to achieve this. Together with our public transport partners, we work continuously on perfecting our services and our performance on the tracks, to provide world-class stations, optimise the customer experience and improve our own organisation. We provide passenger transport and are concerned with station development and operation. These activities yield a total turnover of €6.7 billion, of which 92% from passenger transport.

## NS in the Netherlands and Europe

Ever since NS was founded – in 1837 as HJSM – we have been contributing to mobility and progress in the Netherlands, and the company still plays a very significant social role in the domestic market. Since 2002, NS subsidiary Abellio has been providing rail transport in parts of the United Kingdom and since 2009 in Germany, as well as bus services in London. We also provide international connections with Thalys, Eurostar, ICE, IC Brussels and IC Berlin.

## Our organisation

NV Nederlandse Spoorwegen is at the head of a group that includes NS Operatie (approximately 13,800 staff, on average, in 2019), Commercie & Ontwikkeling (approx. 700), NS Stations (approx. 3,300 including retail), Abellio UK (approx. 12,900), Abellio Germany (approx. 2,400) plus shared services such as HR, Finance and IT.

**NS Operatie** is responsible for rail transport on the Dutch main rail network, including HSL South. This is where the colleagues work who help our trains travel from A to B in the Netherlands and indeed beyond the borders. They include train drivers, guards, mechanics and service staff, as well as the colleagues who, behind the screens, help implement our timetables and manage operations during unexpected events.

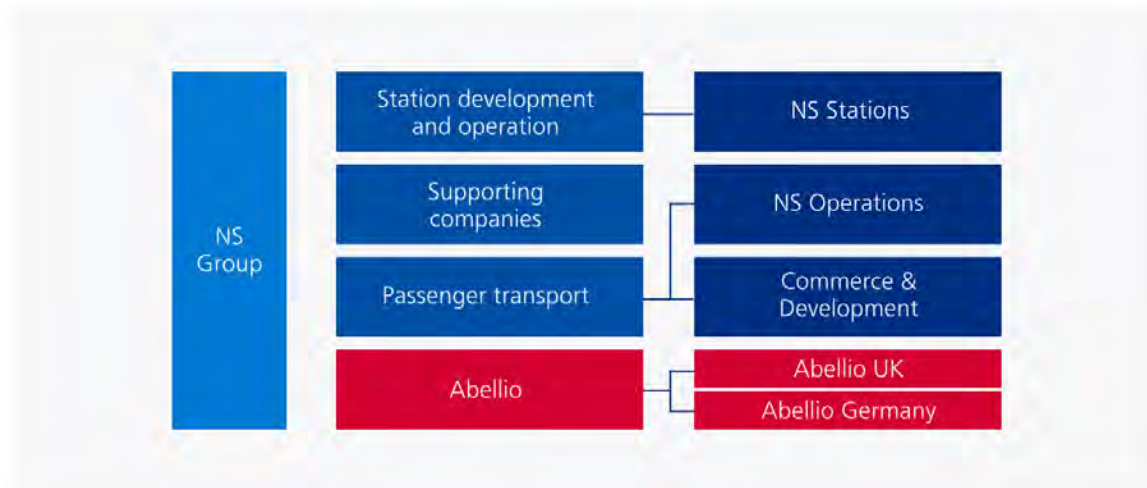
**Commerce and Development** is a unit where colleagues design new timetables, think up train formulas, run the customer services department, provide stakeholder management, launch marketing campaigns and carry out strategic innovative projects. In addition, Commerce conducts satisfaction surveys among passengers and identifies areas for improvement.

**NS Stations** works on a high-quality network of 401 large and smaller stations and promotes area development initiatives around the stations. Together with ProRail, the public authorities and all the carriers, NS Stations aims to make passenger journeys and the time spent in and around stations as pleasant and comfortable as possible. Stations are developing into hubs for various forms of mobility, including functions such as public transport bicycles and bicycle parking. In recent years, NS Stations has worked with ProRail and various municipalities to renovate major stations, with a focus on the need to ensure that stations are 'clean, intact and safe'. All activities – shops, services, facilities and transfer aspects – are designed to improve the passenger experience of the station and the journey.

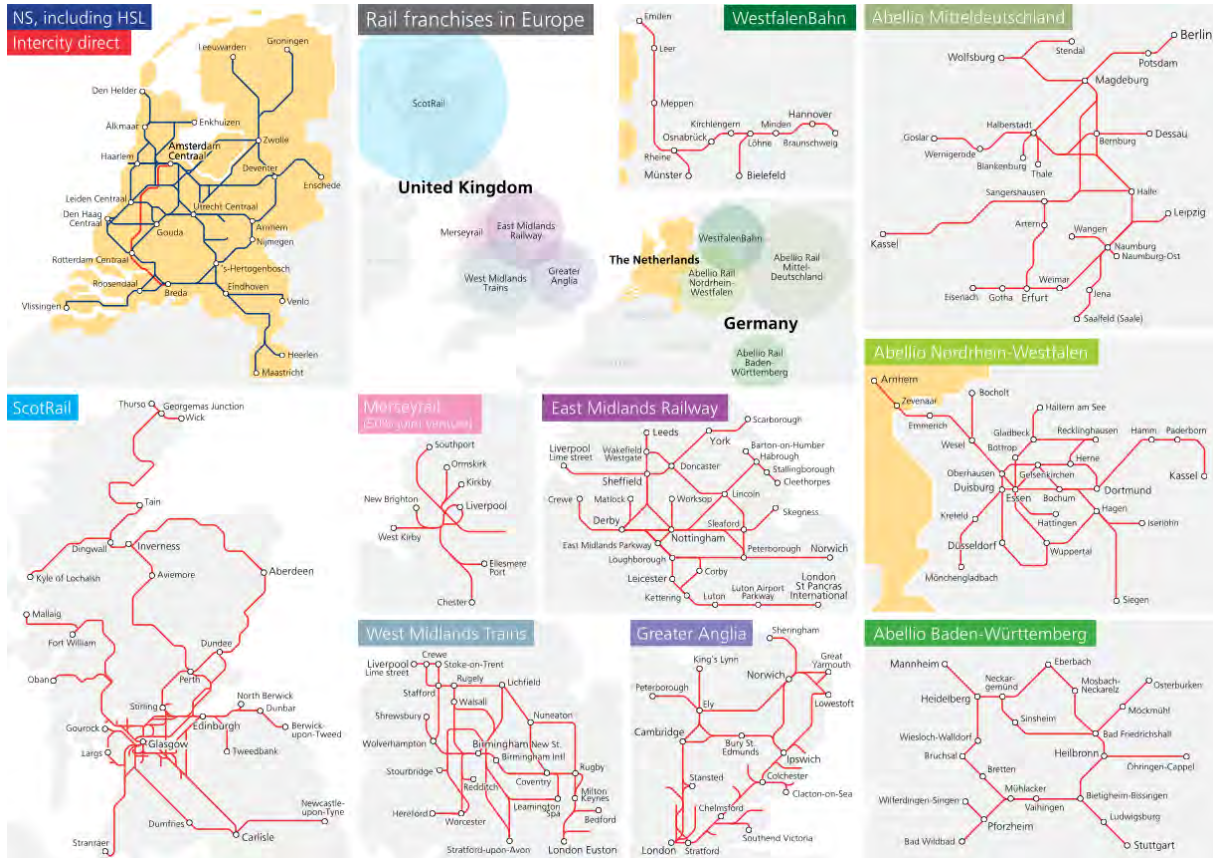
**Abellio UK** bids for and operates rail franchises in the United Kingdom (Greater Anglia, Merseyrail, ScotRail, West Midlands, East Midlands) and operates bus franchises in London. Our 16,300 colleagues in the United Kingdom together transport 840,000 passengers a day.

**Abellio Germany** acquires and operates rail franchises only. In 2019, it operated nine franchises in four regions. Abellio Germany transports around 256,000 passengers a day, with a staff of around 2,700. It started operating the S-Bahn-Rhein-Ruhr and Ruhr-Sieg-Netz 2 franchises in December 2019, and the Stuttgarter Netz in June 2019.

# Organisation chart



## Rail franchises in Europe



## Our trains

Every working day, NS runs more than 5,000 Sprinter and Intercity trains to provide over 1.3 million train journeys. NS is investing in the purchasing, refurbishment and upgrading of trains, largely in response to growing passenger numbers. Proven technology, sustainability and convenience for passengers have the highest priority. Passengers enjoy more seating and experience greater comfort as the availability of trains has increased.



		Number of train sets per 1-1-2020	Number of train coaches	Seats
	<b>SGM</b>	72	197	14,584
	<b>SLT</b>	131	648	34,740
	<b>SNG</b>	81	283	14,838
	<b>DDAR</b>	0	0	0
	<b>Flirt (excl TAG)</b>	58	199	11,990
	<b>ICRmh</b>	39	288	23,747
	<b>VIRM</b>	177	860	87,355
	<b>ICMm</b>	137	461	34,562
	<b>DDZ</b>	50	240	22,853
	<b>ICNG</b>	0	0	79 trains ordered. Coming into service per 2021-2022.
	<b>DDM1</b>	0	0	
	<b>Total</b>	<b>745</b>	<b>3,176</b>	<b>244,669</b>

## New and upgraded rolling stock

The investment in the procurement and upgrading of rolling stock totals €3.8 billion for the period up to and including 2024.

### Upgrading Intercity trains

NS will be upgrading a total of 80 double-decker train sets (VIRMm1) with 415 carriages in a project to be completed in 2020. Most of the upgraded trains – featuring comfortable seating, modern lighting, charging facilities for mobile equipment (in 1st class) and artworks – have already been taken into operation. The last of these trains is scheduled to leave the Haarlem workshop in 2020. In March 2018, NS announced the upgrade of another 45 double-decker trains of the VIRM 2/3 type. This involves 242 carriages with 24,500 seats. The first upgraded trains from this series will start running in 2021.

### Upgraded Sprinter trains

The first upgraded Sprinter trains (SLT type) with wheelchair-accessible toilets and retractable steps were taken into operation in August 2018. The upgraded SLT also offers two designated sites for wheelchairs featuring a special emergency button, as well as tactile information for the visually impaired. The expectation is that all 131 train sets of this type will have been upgraded by the end of 2021. To provide extra comfort, in the first half of 2019 NS fitted all 35,000 seats in the 131 Sprinter trains with imitation leather upholstery.

### New Sprinter trains

The first of the 206 new Sprinters (type SNG) ordered from Spanish train manufacturer CAF started running on 9 December 2018. In 2019, we introduced these trains in our timetable in a phased manner. The new Sprinter trains meet our passengers' wishes to ensure a pleasant and comfortable journey. They are transparent, open, attractive and energy-efficient, featuring Wi-Fi, wheelchair-accessible toilets, wall sockets, USB connections, leather seats, areas designated for bicycles and a floor-level entrance.

### New Generation Intercity

NS will start operating the first New Generation Intercity trains in 2021. The first trains left the factory in 2019, and the process of testing, authorisation for use and staff training is now underway. These fast single-decker trains (maximum speed 200 km/h) are suitable for both the main rail network and the high-speed line. Offering 25,000 seats in total, these trains have everything passengers could want during their journey, including wheelchair-accessible toilets, Wi-Fi, journey information displays, separated waste collection, LED lighting with Intelligent Light Control, USB and electricity sockets in 1st and 2nd class, retractable steps for improved accessibility and extra baggage space. New Generation Intercity trains will be launched on the Amsterdam-Rotterdam-Breda route in 2021, to be followed by services between The Hague and Eindhoven, which will run in part on the high-speed line. In 2019, NS ordered an additional 18 Intercity trains to extend the service to Belgium. By ordering a series of these trains now, NS will have a total of 20 new Intercity trains available from 2025, when the IC Direct and Intercity Brussels trains will reach the end of their useful lives. In addition to running on the domestic network, the new Intercity trains can also be used for services to Brussels, providing additional seating capacity for some 8,000 passengers.

## About the scope of this report

NS is based in the Netherlands and has a single, Dutch shareholder, the Dutch State. In this annual report, which was published on 27 February 2020, we primarily render account to our Dutch stakeholders for our potential social impact in the Netherlands. Even so, we also report on our international operations and have included a separate chapter for that purpose. NS focuses on passengers and on enabling them to enjoy a comfortable door-to-door journey. To that end, NS's main priority is to improve operational performance on the railways, supported by the provision of, for instance, bicycle facilities and station services and by optimised door-to-door journeys thanks to public transport bicycles and collaboration with other partners in the public transport sector and elsewhere. In addition, we aim to remain financially healthy so as to be able to continue investing in services to meet the growing mobility needs in the Netherlands, fuelled by the strong growth in passenger numbers, and to keep train fares affordable. Indeed, this is what our stakeholders expect from us. They also want to see accountability for our non-financial results.

In order to offer passengers the best possible service at the right price, we are also accumulating experience abroad. We monitor the extent to which our results in the United Kingdom and Germany add value for passengers in the Netherlands, in terms of cross-border travel, for example. Our international activities have to benefit the interests of our stakeholders in the Netherlands. Indeed, according to those stakeholders our activities elsewhere in Europe are a materially relevant theme. That is why we have included Abellio's results outside the Netherlands as a separate chapter; this is also because of the material relevance of our activities in the United Kingdom and Germany for NS as a whole. Abellio has little influence on the content of the franchise agreements, as these are determined by the franchise authorities in a public tender procedure. This is why there is less reporting on non-financial performance indicators.

In addition to the financial statements and the combined auditor's report, the NS Annual Report for 2019 contains other information, comprising:

- the Report by the NS Executive Board, including: 2019 in a nutshell, Our contributions to Dutch society, Foreword by the CEO, Our strategy, The profile of NS, Our activities and achievements in the Netherlands, Our activities and achievements abroad, Looking ahead and the following sections under NS Group: Corporate governance, Risk management, NS and taxes, Organisational improvements, Statement by the Executive Board, Dialogue with our stakeholders and Scope and reporting criteria;
- the Report of the Supervisory Board;
- other information, in accordance with Title 9 of Book 2 of the Dutch Civil Code.

This annual report is subdivided into three blocks:

- a core report comprising Our contributions to Dutch society, Foreword by the CEO, Our strategy, The profile of NS, Our activities and achievements in the Netherlands, Our activities and achievements abroad and Looking ahead.  
For the operational results, the core of the report consists of the results that we have achieved within the franchise agreements with the Ministry of Infrastructure and Water Management for the Dutch main rail network;
- a section with other information including Corporate governance, Risk management, NS and taxes, Organisational improvements and Dialogue with our stakeholders;
- Financial statements.

Our activities and  
achievements in the  
Netherlands

# Results for 2019



Over the course of 2019, NS prepared for the government's midterm review of our performance during the first half of the franchise period (2015-2019). By making passengers our top priority we are encouraged to make train services more robust and to offer our passengers a seamless door-to-door journey. We report openly and transparently about our results.



## Main rail network franchise 2015-2025

The State Secretary for Infrastructure and Water Management awarded the rail transport franchise to NS in December 2014. The franchise runs from 1 January 2015 for a term of ten years. Whereas the transport franchise focuses on the longer term, NS also draws up an annual transport plan for the coming year. In the transport plan, we link our aims and objectives to specific actions and performance indicators for the year ahead, ensuring that the goals will be achieved over the course of the franchise. The definitions of the KPIs and the descriptions of the measurement methods used can be found in the Transport Franchise Definitions.

## Minimum and target values

Minimum value: *value for the yearly minimum level of performance required for a performance indicator.*

Target value: *value for the level of performance required for a performance indicator in 2019 and 2024.*

According to the main rail network franchise for 2015-2025, the midterm review is to cover the first half of the franchise period. The review will assess whether the way NS has carried out the franchise activities has resulted in the improvements required for the Long-Term Rail Agenda. The minimum and target values for the 2020-2024 period will also be determined during the midterm review.

## Changed indicators

Every month, NS reports on its performance with regard to well-defined and established KPIs. The KPIs themselves are subject to an annual review to determine whether they should be amended. The annual KPI review for 2020 was conducted at the end of 2019. It did not result in any substantive changes to the KPIs that would affect their meaning or value.

## Background of performance on HSL South

### Train journeys per day on HSL South, as per 31 Dec of the year concerned

	2019	2018	2017	2013
<b>Intercity direct</b>				
Amsterdam-Breda	68	68	70	
Amsterdam-Rotterdam	66	64	62	
<b>Intercity The Hague-Eindhoven</b>	73	73	73	
<b>Thalys</b>				
Amsterdam-Paris	22	26	26	8
Amsterdam-Lille		2	2	2
Marne-la-Vallée	4			
Brussels	5			
<b>Intercity Brussels</b>	32	32		
<b>Eurostar</b>	6	4		
<b>Total</b>	<b>276</b>			

### **Performance in 2019**

HSL South is popular. Passenger satisfaction is growing, thanks in part to improved punctuality and seat availability. Basically, the results of HSL South are good. NS and ProRail are making every possible effort to further improve their performance on behalf of the passengers on HSL South. Punctuality for passengers dropped for a while between late 2018 and early 2019, due in part to a software error in the TRAXX locomotives. That error was remedied in March 2019 and performance has strongly improved since then.

A wide variety of measures, including plan amendments, extra attention and training for staff and a new protocol for stranded trains, has enabled us to perform over and above the minimum score for the third consecutive year.

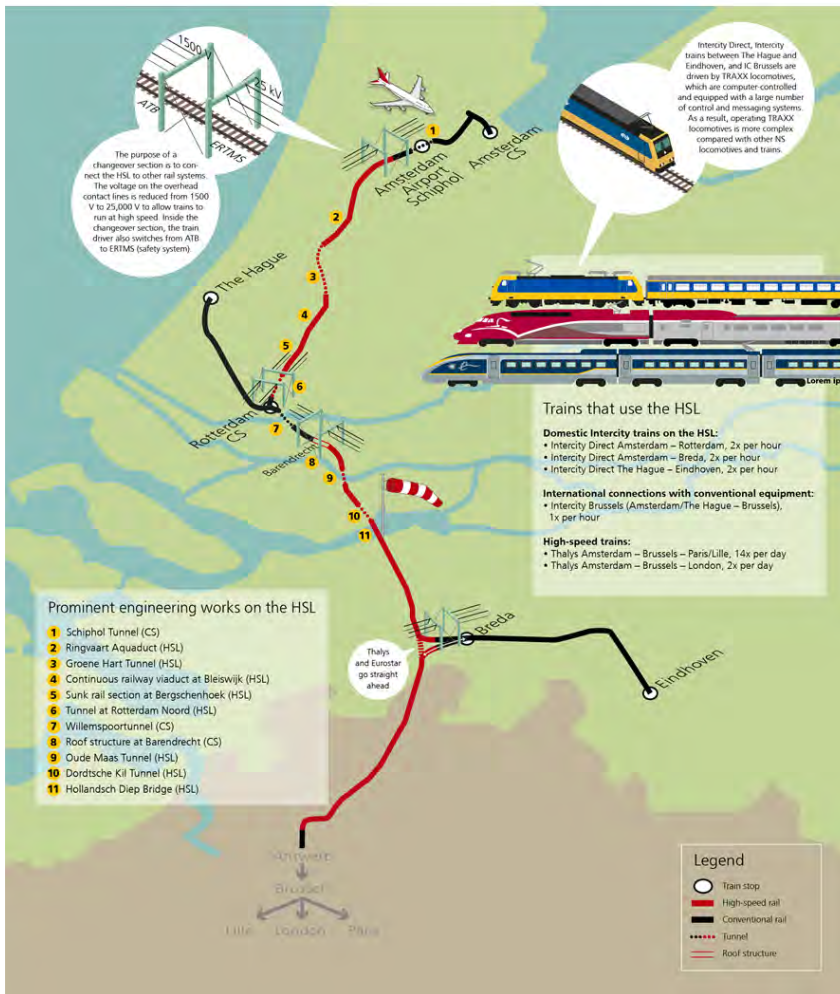
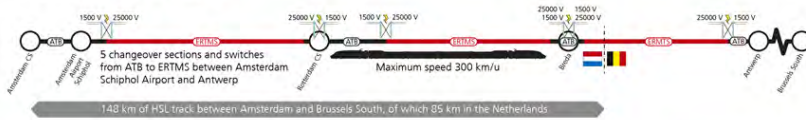
### **Complexity of HSL South**

Even so, providing reliable services on HSL South remains a challenge, due in part to the complexity and location of the associated infrastructure. HSL South involves a unique combination of infrastructure, safety, rolling stock and timetable. There are three types of train that run frequent services on the HSL South tracks. HSL South comprises both newly constructed and conventional tracks, with multiple system transitions en route for the power supply and the safety system. A train travelling on HSL South from Amsterdam to Brussels passes six changeover sections, where the train changes over to a different voltage and a different safety system. On the same route, the train has to deal with four different safety systems and three different amperages. These specific features make HSL South very vulnerable to faults with potentially major consequences for passengers.

According to an independent study commissioned by NS and ProRail, a radical alteration to the infrastructure is needed in order to bring performance up to standard in the longer term and ensure structural improvements.

In the long-term vision for HSL South, NS and ProRail have developed a series of measures for improving the infrastructure on HSL South. Over time, those measures should raise performance levels to those achieved on the main rail network. One example of such a measure is the elimination of system errors in the tracks, such as the multiple changeover sections and safety systems.

## Main features of the HSL



## Introduction of New Generation Intercity on HSL South

In 2021, New Generation Intercity (ICNG) trains will be introduced on HSL South to replace the TRAXX locomotives. Test rides will be performed on the main rail network in 2020. The trains concerned have already been tested in test facilities abroad.

## Governance review

HSL governance will be reviewed upon the launch of the 2020 timetable. Following a successful trial period, we plan to launch an HSL Process Platform, among other things. We will use the Platform for frequent consultation with all the partners in the chain on the performance of HSL South and on specific rail products such as Thalys, Intercity Direct and Intercity Brussels.

# Customer satisfaction



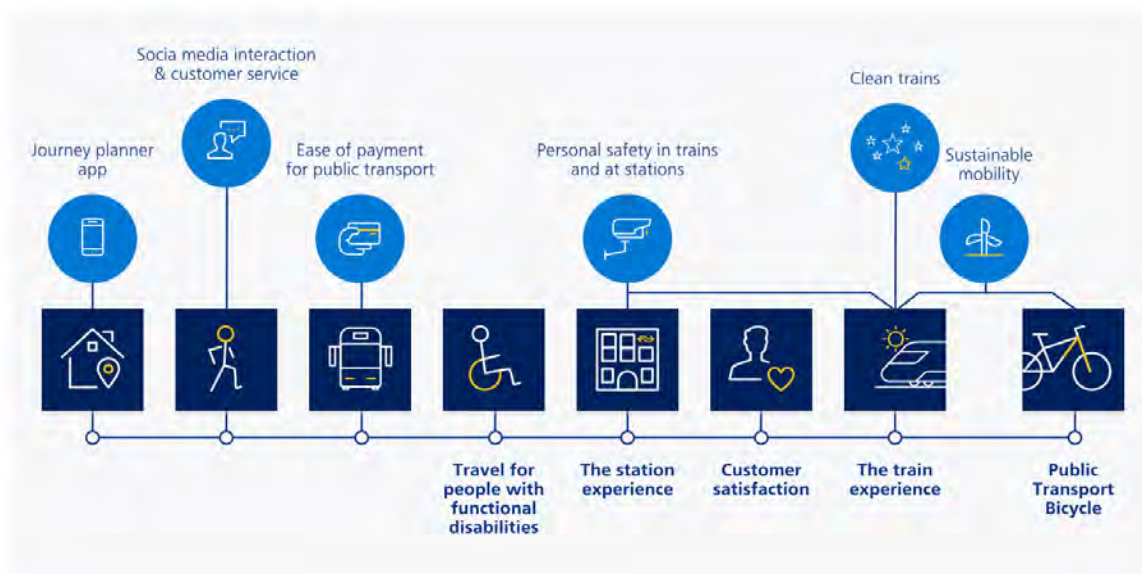
To provide a high-quality passenger experience, three core needs of passengers must be satisfied: planning control, the freedom to make one's own choices, and a feeling of being appreciated. We meet these core needs by providing high-value and personal services.

## Customer satisfaction on the main rail network

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
General customer satisfaction with the domestic main rail network	89%	86%	74%	80%

In 2019, passengers were highly satisfied with our performance on the main rail network. Despite the sharp growth in passenger numbers and more crowded trains, 89% of passengers gave a score of 7 out of 10 or higher, compared with 86% in 2018. Passengers are particularly satisfied with our good operational performance, such as high seat availability and punctuality for passengers. Other important contributors to customer satisfaction include cleanliness on the trains, station experience and seamless travel. Despite the slight fall in seat availability at peak hours, satisfaction among the passengers concerned has actually slightly improved. This can be explained by the better quality of information about crowded trains, enabling passengers to determine more easily what train to take. The improved information also encourages passengers to spread more evenly within trains, and ensures that the crowding as perceived by passengers is more in keeping with the crowding they expected. The overall customer satisfaction score is determined by a range of service factors. For an overview of those factors, see the online page on overall customer satisfaction.

## Customer journey



## Customer satisfaction on HSL South

Performance indicator	Realisation in 2018	Realisation in 2017	Minimum value for 2018	Target value for 2019
General customer satisfaction with HSL South services	87%	83%	68%	73%

At the end of 2019, an average weekday would see approximately 270 trains on HSL South, which is more than agreed in the transport franchise. As such, HSL South is an important part of the Dutch and international rail network. Passengers are more positive about HSL South than they were in 2018, with 87% giving a score of 7 out of 10 or higher for travelling on HSL South (2018: 83%). The higher score is attributable mainly to improved punctuality and seat availability. The overall customer appreciation of HSL South is based on satisfaction scores for IC Direct, Thalys, Intercity Brussels and Eurostar.

## Hospitality

	2019	2018	2017	2016
Customer satisfaction with approachability of NS staff aboard the train	86%	83%	82%	77%
Customer satisfaction with friendliness of NS staff aboard the train	94%	92%	91%	91%
Customer satisfaction with approachability of customer service staff at departure station	88%	86%	84%	80%
Customer satisfaction with helpfulness of platform/concourse customer service staff	85%	83%	81%	79%
Customer satisfaction with friendliness of ticket desk staff at departure station	87%	85%	83%	82%

The percentage of passengers that gave a score of 7 out of 10 or higher for approachability and friendliness of NS staff has increased for both on-train staff and station staff. To achieve that, we extensively shared best practices on hospitality actions in 2019. For instance, we noticed that passengers appreciate direct instead of pre-recorded announcements in the event of disruption. Indeed, this has since become a nationwide standard practice. On IC Direct trains, we ran a pilot to test digital on-board payment with the guard, which enables us to help our customers more quickly. We have also improved the provision of information about lost and found items, increasing passengers' chances of finding back, via NS, objects they have lost.

## The train experience

Train experience monitor	Train	Train journey
Intercity	88% (2018: 86%)	89% (2018: 87%)
Sprinter	86% (2018: 84%)	89% (2018: 86%)

Every year, the Train Experience Monitor measures the scores that 30,000 passengers give for the quality of the train during their journey. The monitor helps us improve our services to passengers. Passengers' scores for Intercity trains improved, due to the influx of modernised rolling stock (VIRMm1). In 2019, 88% of our passengers gave a score of 7 out of 10 or higher for Intercity trains, compared to 86% in 2018. Scores for Sprinter trains also rose: from 84% in 2018 to 86% in 2019, largely due to the introduction of new SNG-type Sprinter trains.

## Clean trains

Passengers expect our trains to be clean. Over the past three years, passengers' assessments of train cleanliness have improved. Last year, 70% of passengers gave the cleanliness of trains a score of 7 out of 10 or higher, compared with 68% in 2018. This is due in part to our efforts to improve the cleaning concept and reduce the number of trains in service that have not been cleaned. We have also improved collaboration between the partners in the chain, such as logistics, service and maintenance companies and cleaning agencies. Nevertheless, the number of trains in service that have not been cleaned is falling slower than it should. As the rail network is very busy, it is not always possible to clean a particular train at the scheduled time and location – despite the fact that cleaning is a full-fledged control parameter in our maintenance and service processes. We have therefore selected this issue once again as one of our priorities for 2020. We have raised the cleanliness standards for the interior of our trains and, in 2019, successfully completed the European tendering procedure for interior cleaning of trains on the main rail network. Implementation is progressing according to schedule. In addition, we have launched a programme to fight graffiti.

Passengers can provide feedback on the cleanliness of our trains using the NS App. Urgent complaints are dealt with immediately, and we always respond to individual passenger feedback.

## Customer service and social media interaction

Number of contacts per month	Social media	Email	Chat	Telephone
	78,000	23,000	73,000	208,000

In 2019, 75% of customers gave our Customer Service department a score of 7 out of 10 or higher. This percentage is lower than in 2018. The number of customer contacts has grown faster than had been forecast, due in part to the increase in low-threshold contact options offered, such as chat. As a result, response times were longer sometimes than our passengers expect from us. We have since improved our understanding of the effects of low-threshold contacts, enabling us to make adjustments and reduce response times. We have launched a pilot with a chatbox allowing passengers to obtain answers to simple questions without the intervention of an NS employee, such as questions about the timetable or how to get a refund after a delay. We expect that this will help to further reduce response times.

## Innovations

Innovations enable us to offer a higher level of service, improve the quality of our products and raise passenger satisfaction about their journey. NS has several departments with responsibility for innovation and product development. They all report to Commerce & Development. We encourage our employees to contribute ideas for innovative products and collaborate closely with sector partners and stakeholders, such as suppliers, on the development of new technologies, services and products. Together we test the innovations and assess the extent to which they will have a positive influence on our customers' journeys. Below is an overview of some innovations that we developed and implemented in 2019.

## Automatic Train Operation (ATO)

Passengers appreciate sustainable travel options. In 2019, NS conducted its first experiment to establish whether Automatic Train Operation (ATO) actually helps to improve rail capacity utilisation, reduce energy consumption etc. We will be running more of these experiments for several different train safety system (ERTMS, ATB) and the shunting process, at what is known as Grade of Automation 2 (GoA 2). At this level of automation, technology is used to assist train drivers in running and halting trains. Starting, running and stopping are all automated. The train driver will take over train operation control when that is necessary.

## Real-time monitoring

Real-time monitoring allows us to measure the condition of trains using on-board sensors. These enable us to determine at a glance if, for example, the train is due for maintenance or repairs, or is at risk of failure. That information may help us to improve punctuality rates and operate without interruptions. For the pilot in 2019, we installed real-time monitoring equipment in a number of Intercity trains and new Sprinter trains. We are also using real-time monitoring on TRAXX locomotives to inform ProRail and Infrasppeed about any malfunctions on the tracks. Additionally, it can help us remedy faults in trains on HSL South more quickly, thereby also reducing cancellations and stoppages.

## Use of drones for maintenance inspection

The annual inspections of stations and other buildings often require the use of scaffolding and cherry pickers, which may cause inconvenience to passengers. In the summer of 2019, NS started using drones for maintenance inspections to perform these tasks more efficiently and safely, at lower costs and with less inconvenience to passengers, as drones do not require large areas at and around the stations to be fenced off. NS has permission to perform professional drone flights around stations and other buildings. The drones produce photos and video footage, allowing visual inspections to be performed more effectively and without inconveniencing passengers.

## Graffiti detection and prevention

NS and its passengers consider graffiti on trains a serious nuisance. NS is developing an app to improve cleaning efficiency. The app also has an automated graffiti reporting function and makes it possible to accumulate a dossier on repeated offenders, allowing staff to check immediately whether an offender caught in the act can be charged with multiple offences.

## Public transport guide for personalised travel advice

In the NS Lab App, passengers join us in exploring possibilities for digital journey support in the future, with a special focus on step-by-step guidance in the travel process. The tool enables passengers to see at a glance how many minutes they have left to catch their train, and when and where they will have to change trains. The app also provides journey information based on the user's location data, whether he or she is on the train or elsewhere. Passengers can help us further improve the app by providing feedback on its functionality.

## Development of artificial intelligence

Five major Dutch companies (Ahold Delhaize, ING, KLM, Philips and NS) have set up a programme called Kickstart AI to boost artificial intelligence in the Netherlands. They aim to promote and grow AI technology and stimulate AI expertise in this country. The five companies have also called for expansion of local know-how and local talent, which is crucial for the ethical implementation of AI. AI applications contribute to solving a range of challenges in society, offer new opportunities for young people and accelerate the introduction of AI in the Netherlands. Consumers benefit from AI as it improves their daily lives through personalised services, greater convenience and more freedom of choice. The



Kickstart AI initiative is intended to generate a variety of projects, including an AI competition, higher education programmes and a nationwide AI training course. NS is facing real-life challenges that may be solved using AI. For example, AI may help to facilitate the use of public transport through app functionality and by ensuring optimum combinations of various modes of transport. AI can also contribute to more efficient utilisation of the railway system.

## 'Better and More': developments on and around the tracks

In 2019, NS and ProRail joined forces in the 'Better and More' programme to create more reliable train services and make rail travel even more attractive. 'Better and More' comprised the following sub-programmes: 'Adjusting and Controlling the Future' (to solve issues related to active adjustment and control), 'Driving Improvement at the Stations' (to create attractive stations), 'Handling and Shunting' (to ensure sufficient service, maintenance and shunting capacity) and 'Driving Improvement for Trains A2' (to run an Intercity train between Eindhoven and Amsterdam every ten minutes). 'Driving Improvement for Trains' will be repeated on the Arnhem-Schiphol Airport-Rotterdam corridor.

## Enjoying travel time

NS wants passengers to experience their travel time as their own time and give them every opportunity to put it to good use. To that end, NS has teamed up with the public authorities, knowledge institutions, partners within the rail sector, suppliers, design agencies, designers and passengers. In 2019, for example, NS developed digital functionalities and included them in the NS Lab App for a small trial group of users. Tested features include MindfulNS, a railway quiz and podcasts. Once proven successful, they will be rolled out in the NS App. Another new initiative is the 'Inspiring Journeys' programme, in which we work with partners on services and facilities to improve the door-to-door journey.

# Performance on the main rail network and HSL South



Solid performance is the basis for customer satisfaction and healthy financial results. These are necessary to keep train fares affordable and enable us to finance the necessary investments to accommodate the growth in mobility.

## Punctuality on the main rail network

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
Punctuality for passengers (to 5 minutes) on the main rail network	92.6%	92.6%	88.9%	91.1%

Passengers attach great importance to the safety, reliability and predictability of their journey. NS makes every effort to ensure the punctuality of services 24/7, throughout the year and everywhere in the Netherlands. Our 'punctuality for passengers' performance indicator also incorporates data on whether passengers made their connections. In 2019, punctuality for passengers remained unchanged relative to 2018, at 92.6%. This score is the result of a robust timetable whose reliability is optimised on a continuous basis. In addition, we introduced a number of tools to further improve punctuality in the implementation of the timetable. For example, in May 2019 we launched the roll-out of the smartwatch for train guards. At Utrecht CS we ran a pilot with supplementary boarding information for passengers: crowding on the train, minutes left before departure and final countdown (last ten seconds before the guard blows the whistle). Unfortunately, we have also witnessed several events that prevented us from providing the intended level of service. Most of these events resulted from rolling stock defects, work on the rail infrastructure and unfavourable weather conditions.

### Influence of the weather on our timetable

The wintry weather conditions on 21, 22 and 30 January 2019 caused NS to adjust its timetable and reduce the number of trains in service. The heat in July caused cancellations due to malfunctioning trains, points failures and other breakdowns, resulting in inconvenience to passengers. While typical autumn conditions occurred early in the autumn, the expected dip in punctuality rates due to slippery tracks was limited. Every year NS is better prepared to deal with adverse weather conditions and recovers faster by switching to an adjusted timetable, large-scale deployment of mechanics for repairs and technical modifications to trains.

## Punctuality for passengers to 15 minutes on the main rail network

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
Punctuality for passengers (to 15 minutes) on the main rail network	97.7%	97.7%	96.7%	97.3%

Punctuality for passengers to 15 minutes on the main rail network was 97.7% for 2019 as a whole; the same figure as in 2018. This KPI is determined largely by major disruptions and missed connections. As with punctuality for passengers to 5 minutes, the smooth introduction of the new timetable had a positive effect. In addition, we subsequently implemented changes to improve several changeover options.

## Punctuality on HSL South

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
Punctuality for passengers on HSL South	83.4%	82.5%	82.1%	84.1%

Punctuality for passengers on HSL South to 5 minutes was 83.4% in 2019, nearly one percentage point higher than in 2018 (82.5%). Together with its partners in operations, NS made a great effort to streamline collaboration. This has reduced the time it takes for stranded trains to resume their journey or, if that proves impossible, to remove them from the track.

Due to a software error in late 2018 and early 2019, punctuality for passengers initially was below the minimum value. A software update in March 2019 served to remedy the error; performance has strongly improved since then. In addition, we introduced planning amendments, ensured extra attention and training for staff and launched a new protocol for stranded trains. In 2019, we installed inspection cameras in changeover sections (sections of the overhead contact lines where a train changes over to a different voltage) at Hoofddorp and Zevenbergschenhoek, which helped to reduce inspection times. We also took preventive measures to alleviate nuisance caused by swans. In addition, we started a study into the removal or relocation of two changeover sections that caused relatively many trains to strand. We also set up an ERTMS test lab so as to be able to test trains without having to use operational infrastructure. Finally, as part of the ERTMS programme we are examining how the roll-out of ERTMS on the main rail network impacts the transition to HSL South. These studies continue beyond 2019.

NS and ProRail are making every possible effort to ensure optimum performance on HSL South. In 2020, we will continue the HSL South Improvement Programme. Special attention for HSL South has also been firmly anchored in NS's management structure.

## Seat availability at peak times on the main rail network

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
Seat availability at peak times (main rail network)	94.9%	95.1%	94.3%	95.5%
Top ten most crowded trains	2.1%	2.5%	4.9%	4.0%

In 2019, the number of passenger-kilometres increased by 3.7% (2018: 2.4%); nearly double the estimated percentage used by the government to determine the level of investment required. This growth was especially evident on routes in the Randstad conurbation that were already quite busy, such as Utrecht - Amsterdam and Utrecht - Rotterdam/The Hague. The growth in passenger-kilometres can be attributed in particular to factors including the favourable economic conditions and NS's solid operational performance. That is why trains are getting increasingly crowded, especially in the traditionally busy autumn period. NS aims for passengers to be satisfied with their space on the train. We adjust the availability of the rolling stock and the number of available seats to suit passengers' needs where possible, and also include social costs into the equation. For example, in our timetable we ensure that the length of the trains deployed matches expected passenger demand. We do so on the basis of passenger counts, information from our staff and reports from our customers that come in via the NS App, Customer Service and social media. We promote a more balanced distribution of passengers on our trains using public announcements, the extended Zitplaatszoeker (seat searcher) in the NS App and targeted deployment of our service staff. In

addition, in the first half of 2019 we tested several new ways to encourage passengers to opt for alternative, less crowded trains. For example, we sent personalised messages to NS-Extra customers who regularly travel on crowded trains.

Despite these measures, offering sufficient numbers of seats on our trains continues to be a major challenge. NS is investing continuously in more and new trains. The first of the 206 new Sprinter trains ordered from Spanish train manufacturer CAR started running in December 2018 and were subsequently deployed on other routes in the country as part of a phased introduction scheme. Due to the increasing numbers of passengers and trains, we are now approaching the limits of infrastructural capacity. For example, we cannot deploy longer trains at stations where the platforms are too short for them. Moreover, the availability of shunting and handling capacity may in the long run prove insufficient.

It is unrealistic to expect all passengers on all trains to find a seat at peak times. In conjunction with other local and national parties, such as educational institutions and the Ministry of Infrastructure and Water Management, NS is developing a comprehensive approach of capacity at hyper-rush hours through such initiatives as the 'Better Utilisation' programme and the 'Well on Track' project to alleviate congestion on trains travelling to Utrecht Science Park and to relieve Utrecht CS.

## Seat availability at peak times on the main rail network

Seat availability at peak times on the main rail network was 94.9% in 2019. That is 0.2 percentage points lower than in 2018, with growing passenger numbers. The 2019 score is the result of a combination of factors. For example, works on the tracks reduced seat availability in 2019. Works near Leiden continued for three weeks, and the trains serving Naarden-Bussum, Boxtel and other stations at peak hours were either fewer in number or shorter while alternative routes were busier than usual. In addition, in early 2019 passenger volumes rose faster than had been anticipated, resulting in more passengers being unable to find a seat and having to stand at peak times. In the autumn we extended trains to their maximum length on busy routes with many standing passengers. Due to the high passenger numbers and maximum train length, any deviations in the timetable or in train availability had an even greater impact on seat availability. The NS App shows passengers at a glance when a train is shorter than usual and is likely to be particularly crowded as a result. Passengers can use that information to plan their journey and perhaps take an earlier or later train.

## Top 10 most crowded trains

For the top 10 most crowded trains, the score was 2.1% in 2019, which is an improvement compared with 2018 (2.5%). This percentage reflects the probability of a passenger being unable to board a train on one of the preselected ten busiest routes during peak times. The top 10 of most crowded trains is dominated by peak hour trains between Haarlem and Amsterdam. In 2019, we used longer trains on this route, resulting in an improved score. In fact, from a planning perspective the chance of a passenger finding a seat or standing room has risen to practically 100%. In the event of disruptions to train services, rolling stock issues or a large influx of passengers (e.g. on routes to the coast on a sunny day, or during major events), trains can occasionally still be more crowded than normal.

## Seat availability at peak times on HSL South

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
Seat availability at peak times (HSL South)	97.1%	94.0%	91.2%	94.9%

Our aim is to provide excellent service to our passengers on the high-speed line. To that end, we intend to further improve our performance within the existing parameters set by infrastructure and rolling stock. We have already been quite successful when it comes to seat availability on the high-speed line. Despite the further increase in passenger numbers on the busiest section between Rotterdam and Schiphol Airport (+7.7%), seat availability on HSL South in 2019 was higher than in 2018: 97.1% compared with 94.0%. This improved score can largely be attributed to the additional seating capacity (+32%) from the use of more and longer trains. More trains, because the frequency of IC Direct between Amsterdam and Rotterdam was increased by adding IC Brussels as the fifth hourly train on HSL South. And longer trains, because we extended all domestic IC Direct trains by adding a seventh carriage. Effective December 2019, some trains between Rotterdam and Amsterdam even have nine carriages. Finally, improved operational performance – and especially the decrease in the number of cancelled services – favourably influenced seat availability on HSL South.

## Journey information

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
Information on the train and at stations about delays	84.5%	85.2%	75.0%	80.0%

NS wants to give passengers more control over their door-to-door journeys and more freedom of choice, irrespective of the means of transport or the carrier. High-quality journey information plays a key role in this, especially when a disruption or other unexpected event changes the course of the journey. Journey information has to be accurate, frequent, in time, consistent and up-to-date so that passengers can make better choices both before and during the journey. Every year, NS sends hundreds of millions of travel advice messages about rail travel, works on the tracks and disruptions. In 2019, we gave timely information – on the train and at the station – about disruptions in 84.5% of cases (2018: 85.2%). In early 2019, NS and ProRail set up a team tasked with reducing the number of faults on station displays. By adjusting the software and ensuring better alignment and configuration of aerials, the team managed to reduce the number of faults by 90%. In addition, on-board staff use the PA system to make sure passengers are promptly informed whenever an unexpected disruption occurs.

### XL displays at the stations

In December 2019 we installed an XL journey information display at Rotterdam CS. The 9.5 x 1.8 metre screen allows us and ProRail to show all departure times and travel advice in a single overview. Similar displays will be installed at Den Haag CS and Utrecht CS in 2020.

### NS App upgrade

NS is continuously improving the journey planner on the NS App and on its website, [www.ns.nl](http://www.ns.nl). On the app we have added extra routes and trains to the Zitplaatszoeker (seat searcher) and enhanced the TrajectBewaking (route monitor) function. The route monitor provides users with information about any disruptions on a pre-defined route. In addition, we have developed a type of travel advice that incorporates all travel modes that are available for a particular journey. As a result, passengers may sometimes be advised to take an underground train, a tram or a bus instead of a deviated train. By issuing proactive warnings and offering optimum travel advice covering all modes of travel, we allow

passengers to take control of their journeys. In 2019, we ran a trial in Utrecht with platform displays showing information about the level of crowdedness in trains. The trial will be evaluated in 2020. This information is also becoming available for more and more routes in the NS App. This should result in more comfortable journeys by ensuring a more balanced distribution of passengers on busy trains.

## Travel information during the train journey

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
Journey information during the train journey	85.3%	85.0%	81.4%	83.1%

The 'Travel information during the train journey' performance indicator states whether the journey information provided five minutes before the actual departure of the train was correct in cases of delayed departure or a platform change. Our score for this indicator was 85.3% in 2019; 0.3% higher than in 2018. To optimise the information provided, we are continuously making small improvements to the underlying IT systems. In 2019, we developed a dashboard that allows us to monitor our performance on this indicator per individual station on a monthly basis and identify areas where the information should be improved. We share the dashboard with ProRail.

## International connections

Together with its international partners, NS connects the Netherlands to major cities and regions in Germany, Belgium, France and Britain. That fits with our ambition to make international trains an attractive alternative for flights for distances of up to 700 kilometres. In 2019, the number of destinations available in the train reservation system rose to over 3,300. More and more people are finding their way to international trains. The number of international train journeys sold by NS rose by 13% compared with 2018, to over 3 million. We also added a new partner in 2019: BB, the Austrian Railways. In 2019, we announced our intention to launch a daily night-train service between Amsterdam and Vienna starting in December 2020. This will reconnect the Netherlands to the European night-train network.

### Intercity Brussels

Intercity Brussels trains run 16 times a day: 12 daily services between Amsterdam CS and Brussels South/Midi, and 4 daily services between Den Haag HS and Brussels South/Midi. Punctuality scores for Intercity Brussels trains improved in 2019, and there were fewer cancellations. In 2018, punctuality was at 83.9% and 6.5% of services were cancelled; in 2019 punctuality rose to 85.4% and cancellations decreased to 5.5%. The issues were caused in part by a software error in the locomotives; that error was resolved in March 2019. Seat availability also increased. IC Brussels was introduced as the fifth hourly train on the high-speed line, thus also increasing the number of seats available on the route between Amsterdam and Rotterdam.

## Thalys

Since April 2019, two Thalys trains a day take passengers to Charles de Gaulle Airport and Marne-la-Vallée/Disneyland. Every weekday, 14 Thalys trains leave the Netherlands for France. In September 2019, it was announced that Thalys was to replace one KLM return flight between Amsterdam and Brussels a day, starting in April 2020. This signifies a major step in the plan to replace flights by train journeys. This move is part of the Train-Plane Action Agenda that we are developing in collaboration with the Ministry of Infrastructure and Water Management, ProRail, KLM and Amsterdam Airport Schiphol. The action agenda comprises initiatives to further improve connections for international rail and air passengers, freeing up more space for sustainable growth.

## ICE International and Intercity Berlin

During the summer months, NS International sold 17% more journeys compared with the same period in 2018. In collaboration with DB, the Ministry of Infrastructure and Water Management and ProRail, NS continued its efforts in 2019 to reduce the travel time of several daily trains to Berlin by ten minutes as of the 2021 timetable. This initiative will result in a travel time of 6 hours and 12 minutes. We also studied promising acceleration measures for the medium and longer term, including trains that can deal with multiple overhead voltage levels, other infrastructure-related measures and smart timetabling. In this context, NS seeks close alignment with the 'Vision for the Future of Public Transport 2040' and its further development.

## Eurostar

In 2019, the number of Eurostar trains increased from two to three per day. Passengers travelling from the Netherlands to London have to change trains in Brussels; those in the opposite direction have a direct connection. The legal framework for passport control, which will make it possible for passengers to have their passports checked in the Netherlands for four frequencies a day, is expected to be finalised in the first quarter of 2020. Eurostar will then be able to operate a direct connection from Amsterdam to London and reduce the travel time to just four hours from central Amsterdam to central London. In addition, in 2019 Eurostar asked the Dutch Authority for Consumers & Markets (ACM) for permission to operate a fourth daily service.

### Ajax takes Eurostar to Lille

At the end of November 2019, AFC Ajax took the train to France for the away match against Olympique Lille in the UEFA Champions League. Following the draw, Ajax took the initiative to examine opportunities, together with NS, of travelling to the away match in Lille by train as a sustainable alternative to flying. NS facilitated the journey in collaboration with Eurostar.

## Availability of trains

NS withdrew an average of 11.4% of its trains for maintenance, repairs and refurbishment on any given day in 2019 (2018: 12.4%). This meant that enough trains remained available for our timetable. Even so, we are working on further lowering this percentage in order to increase the number of seats for passengers.



## Scheduled and unscheduled withdrawals

There were numerous withdrawals from service in 2019, resulting in temporary reductions in infrastructure capacity. In the spring, only limited train services were available around Leiden and in the Den Bosch-Boxtel area. In the summer, train services were replaced by bus transport at Sittard, Naarden-Bussum and Gouda, with a negative impact on punctuality. In 2019, NS worked hard, with ProRail and the other transport operators, to ensure alternative transport for passengers. We also made sure to inform passengers about withdrawals well in advance and improved disruption-related information services both at the stations and on our trains.

ProRail carried out works on the Leiden shunting yard between 24 March and 15 April, which caused more inconvenience to passengers than had been expected. NS and ProRail underestimated the consequences of the choice to continue part of the train services, causing overcrowding on trains. NS apologised to passengers and offered them free coffee or tea to compensate for the inconvenience caused. Another notable event was the power failure in the province of Noord-Brabant on 24 March, which paralysed train services between Boxtel and Eindhoven for nine hours.

Since 2019, NS has used an integrated plan to manage its infrastructural requirements more effectively, and we are working with ProRail to ensure that the Randstad conurbation remains accessible during scheduled work in the Amsterdam Metropolitan Area. Collaboration on behalf of future-proof and efficient railway maintenance, in the context of ProRail's 'Work on the Tracks to Prepare for the Future' programme, is making good progress.

### **Nationwide demonstrations on pensions**

In the past year, NS employees went on strike on two occasions within the context of national demonstrations on pensions. On 28 May, there were practically no trains anywhere in the country due to the strike. While NS understands employees' concerns about pensions, we are disappointed that they chose to express those concerns in a way that caused significant inconvenience to our passengers, which is all the more regrettable in that NS is not a party to the conflict.

## What has the withdrawal from service in Leiden taught us?

If we are to keep our rail network in good shape, we need to maintain it carefully. This will inevitably lead to a certain amount of inconvenience to passengers. Work at and around the Leiden shunting yard continued for 21 days, from Sunday evening 24 March to Monday morning 15 April 2019. The work involved the renovation of tracks, points, signals and the safety system. The adjusted transport plan meant fewer trains and the use of buses to transport our passengers. The overall logistic plan was within the standards applied in the railway sector for minimum capacity. However, the plan failed to properly allow for delays and unscheduled disruptions. Due to the location of Leiden in the heart of the Randstad conurbation, there was an increased risk of knock-on effects, which hampered adjustment efforts.

When implemented, the plan produced unexpected effects, due in part to the much higher number of passengers than anticipated. We should have been more alert to this in our communications. In addition to causing dissatisfaction among our customers, this situation also had adverse effects on our operational performance. We will certainly use the lessons learned in Leiden in our future maintenance projects. We are improving the project structure, especially through the deployment of a central specialist / project leader in the integrated preparatory phase for each event or withdrawal from service. When drawing up logistics plans, we will increase our focus on feasibility – especially in the busy Randstad conurbation and given the risk of knock-on effects - and on the communication options available. Finally, we ensure that the project leader has an integral overview and the required mandate, to guarantee that the right measure are taken at the right moment, for instance with regard to staffing, communication and signage. With these changes, our customers will know better what to expect during withdrawal situations and have more control over their journeys. We will use the appropriate tools that will help our customers during their journeys. And even when things are not developing as planned, it is our ambition to ensure that customers still experience a predictable and reliable journey thanks to solid preparatory and organisational measures.

## Timetable for 2020

The timetable for 2020 shows some minor adjustments compared with 2019. Ninety-five per cent of passengers will see almost no change in their train journey. Passengers on Sprinter trains from the north of the country will enjoy shorter travel times; they will arrive at their destinations sooner in Friesland, Groningen and Drenthe thanks to faster trains. The connection for passengers between Zwolle and the Randstad conurbation in Meppel has been improved. The drawback is that this will result in a longer waiting time for a small group of passengers on Sprinter trains from Friesland who change in Meppel for destinations in Groningen/Drenthe. In the central part of the Netherlands, the number of Intercity trains between Utrecht and Amersfoort will increase. In addition, we will deploy extra trains to accommodate peak-hour traffic between Harderwijk, Nijkerk and Amersfoort. Passengers on these extra trains enjoy a good connection in Amersfoort to Intercity trains in the direction of Utrecht CS and Schiphol Airport, reducing travel times on these routes by up to thirty minutes. Over the summer period, we plan to increase the number of trains to Zandvoort aan Zee from four to six per hour so as to be able to carry large numbers of day trippers to the beach. The infrastructure has been adapted to allow us to increase the service frequency. We have restored the Intercity connection between Dordrecht and Eindhoven; there will be four intercity trains per day on this route. This is an important step, given that trains from The Hague to Eindhoven no longer call at Dordrecht since they started using the high-speed line.

## **New station names**

We have renamed three stations: Delft Zuid is now Delft Campus, Amersfoort is Amersfoort CS and Eindhoven has become Eindhoven CS. Over 40,000 passengers use these stations every day.

# Door-to-door journey



Passengers usually set out by bicycle, sometimes on foot, or by car or another form of public transport. The end station is seldom their final destination. We want to offer passengers a rail service that meets their need for a seamless and reliable door-to-door journey, in cooperation with our partners.

## Quality of NS connections to other carriers

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2019
Quality of NS connections to other carriers at the major hubs	96.0%	95.8%	94.0%	95.6%

For predictable door-to-door journeys, it is important that passengers have good changeover connections from NS trains to other carriers' trains. We measure this using the percentage of trains on the main rail network that are delayed by less than five minutes on arrival at one of the 27 changeover stations. In 2019, the score for the quality of connections to other carriers was 96.0% (2018: 95.8%). The quality of connections benefited from the solid logistic plan and its strict implementation. This KPI is determined to a relatively large extent by the low punctuality of IC Berlin trains from Germany.

## Travelling without barriers

To keep rail travel attractive, we are investing in forms of transport that complement the train. This helps us ensure a pleasant journey to and from the station and make the door-to-door journey more convenient.

### Bicycle parking

Around 45% of rail passengers cycle to the station. They are able to use supervised bicycle parking facilities for 173,000 bicycles, unsupervised facilities for more than 311,000 bicycles and 12,000 bicycle lockers at stations. ProRail and NS Stations are working with partners to develop bicycle parking facilities where rail passengers can store their bikes easily and conveniently. Our offering includes free storage for every first 24-hour period (at 64 storage facilities), digital pointers to the free storage slots, the option of paying with the OV-chipkaart, and a uniform design. In 2019, the municipality of Utrecht, ProRail and NS Stations opened one of the world's largest bicycle parking facilities at Utrecht CS, which can accommodate 12,500 private bicycles and 1,000 public transport bicycles (OV-fiets). Amstel Station in Amsterdam saw the opening of an entirely new and expanded parking facility for 3,300 bicycles in total, while at Tilburg station construction began of two new bicycle parking facilities that together will accommodate over 7,500 bicycles.

### Testing innovations at the NS Fiets InnovatieLab

Under the banner of 'Fiets InnovatieLab', we partnered with a variety of players in 2019, and in different parts of the country, to test the following innovations:

- a new check-in and check-out zone, enabling passengers to check in and out using their OV-chipkaart without having to see a service staff member. Passengers can also opt for a tag on their bicycle for fully automated checking in and out. This will further reduce the time they need to park their bikes, while giving service staff more time for other service duties;
- a smart lock for public transport bicycles, to be opened and closed using the OV-chipkaart;
- new bicycle stands for non-standard bikes; a ProRail pilot in which NS Fiets participates;
- e-bikes for business users. These are shared bicycles that are left at the station by commuters in the morning for use by other commuters who cycle from the station to their place of work.

## Fiets & Service

Fiets & Service is a service format for bicycle repairs, parts and accessories. At the end of 2019, 24 stations had a Fiets & Service centre. In 2019, NS Stations signed an agreement with bicycle gear brand AGU for the provision of bicycle components and accessories for OV-fiets public transport bicycles and Fiets & Service. The switch to a single supplier for OV-fiets and Fiets & Service has benefited the efficiency and uniformity of service and boosted economies of scale.

## OV-fiets

Passengers made 5.3 million rides by OV-fiets (public transport bicycles) in 2019 (2018: 4.2 million). In all, over 20,000 public transport bicycles are available at nearly 300 locations throughout the country. Customer satisfaction with OV-fiets has also increased, to an average score of 8.1 out of 10 (2018: 7.9). The percentage of passengers that awarded OV-fiets a score of 8 out of 10 or higher rose from 69% in 2018 to 76% in 2019.

## Car parking

Over 5% of rail passengers travel to the station by car and park there. In 2019, NS expanded P+R capacity at four stations, adding 132 parking spaces in total. At the beginning of 2019, NS awarded the management of the 50 paid P+R car parks near its stations, offering more than 10,000 parking spaces in total, to Q-Park. NS itself is responsible for the P+R policy and the operation of paid P+R car parks near the stations. We are now working with our partners to develop a new access, discount, payment and exit concept for these facilities, and conducted the initial tests at Rotterdam CS and Driebergen-Zeist station in December 2019.

## NS Zonetaxi

NS Zonetaxi was introduced at 244 additional stations at the end of 2018. Passengers could make use of NS Zonetaxi at a total of 377 stations in 2019. Online booking and prepayment facilities (with iDEAL) have made it even easier for passengers to arrange a zone taxi.

## Business travel: NS Business Card

The NS Business Card is available to facilitate business travel for companies and organisations. They pay in arrears for the journeys made by users, which are collected on a single invoice. There is no subscription fee. In 2019, the number of NS Business Cards increased by 10.5% compared with 2018. We entered into more than 700 new partnerships with organisations, including the Prinses Máxima Center for Pediatric Oncology.

## Ease of payment in public transport

The OV Payment programme launched by the NOVB (National Public Transport Council, of which NS is a member) was set up to increase ease of payment and add payment options for public transport passengers. In future, passengers will be able to pay their fares using their bank cards, credit cards, mobile phones, smartwatches or other items as well as the regular OV-chipkaart (public transport smart card). A trial involving payment by smart card was conducted on the The Hague - Leiden route from January through to July 2019. Contactless payment technology enabled passengers to check in and out using their bank cards or credit cards. The costs of the journey were debited automatically at the end of each day. Around 300 passengers made a total of approximately 2,000 journeys using their smart cards. Of the trial group, 90% said that 'travelling using a smart card' offers additional convenience, 75% said that smart cards offer benefits compared with the regular OV-chipkaart and nearly 70% said that using a smart card lowers the threshold for choosing public transport. We also learned a great deal from the trial in the technical domain. For example, we will have to increase passenger flow rates at the check-in and check-out gates and posts, and improve on-board inspections and the processing of travel data to give passengers real-time insight

into their journeys and the associated fares.

NS has launched an initiative to simplify the travel process for passengers using an NS Business Card. This has already resulted in improvements to the NS App, including a tool that allows passengers to change the class in which they are travelling. They can now do so online up to fifteen minutes after checking in.

# Stations and their environment



Stations are hubs for mobility and quality of life. They are places where people arrive, depart or linger for a while. In close collaboration with ProRail, we offer a range of facilities at stations to ensure a pleasant environment for visitors and allow them to make the most of the time they spend there. Passenger perception of the station is an important component of their overall satisfaction with the journey.



## An improved station experience

NS is making every effort to ensure that the station and surrounding area offer a pleasant and welcoming environment for passengers, visitors and the inhabitants of the town or city concerned. NS Stations is responsible for the day-to-day running of the stations. It also acts as a property and area developer. The passenger's experience and ease of changing trains are the central focus in our approach. NS Stations offers a range of services at the stations, depending on their size, to ensure visitors have a pleasant stay and can make the most of their time. To that end, we provide approachable and welcoming staff, journey information for all modes of public transport, excellent accessibility and easy transfers to bus, tram, underground and bicycle facilities. In 2019, the upward trend in customer satisfaction nationwide with stations continued, with the proportion of those giving a score of 7 out of 10 or higher increasing to 77% (2018: 76%). The major stations received a score of 80% in 2019 while smaller stations scored 69%. Heerlen station, which was only completed recently, saw the sharpest increase in satisfaction scores: from 41.5% to 80.6%, thanks to refurbishment of the station and new facilities, and the surrounding area.

	2019	2018	2017	2016	2015
Customer satisfaction survey on stations	77%	76%	73%	70%	67%

## Hospitality and a pleasant stay

In 2019, NS Stations and its partners once again made improvements to numerous stations. We invested in facilities to improve the level of hospitality, including facilities at smaller stations. In February 2019, NS announced its intention to refurbish some 200 regional stations. The project will see NS and its partners upgrade waiting facilities at the stations, renovate sanitary facilities and install drinking water fountains. We are also investing in improvements to the parking facilities for cars and bicycles. We are looking for suitable solutions for vacant premises at the stations to improve the atmosphere and personal safety while retaining the distinctive character of the property concerned and taking proper care of our heritage.

### Improved waiting area facilities

In 2019, we opened Station Living Rooms (StationsHuiskamers) at the stations in Emmen, Almere Buiten, Weesp, Heerlen, Boxtel, Almere Muziekwijk, Heemstede Aerdenhout and Schagen, bringing their total number to 24. The Station Living Rooms offer visitors a pleasant space with facilities such as coffee/tea, sockets, toilets and journey information. The new Station Living Rooms are housed in the premises previously occupied by Kiosk shops. The former Kiosk employees now serve as hosts in the Station Living Rooms and, as such, are an important point of contact for passengers. In 2020, we will be converting another four Kiosk outlets into Station Living Rooms, mainly at smaller stations. In addition, we are looking for effective ways to improve passengers' experience of the stations while they are waiting for their trains. For example, at Coevorden the new tenant of the vacant station building has reintroduced a coffee and drinks outlet for passengers. The facility also includes toilets and an attractive waiting area. In collaboration with passengers, ProRail, the University of Amsterdam and the Weekend of Science initiative, we examined ways in which waiting areas can improve passengers' perception of waiting. The results of this study will become available in early 2020.

## Toilets at our stations

Toilets are an important basic facility for hospitable stations. We are making the toilet facilities safer, more comfortable and more accessible for passengers, with a recognisable service concept. After a franchising tender, NS Stations awarded responsibility for the toilets at 23 larger stations to Sanifair.

Together with ProRail, NS is refurbishing toilet facilities at the smaller stations: as a result, within three years 90% of all passengers will be able to use modern, clean and accessible toilets. We are also introducing high-quality unstaffed toilet facilities at a large number of regional stations. Forty-five of these were taken into operation in 2019. NS Stations is providing contactless payment modules for both newly built and existing toilets. In 2019, 108 of these modules were installed at station toilets.

## Water fountains at stations

Together with its partners, NS is rolling out a project to install free drinking water fountains at over 200 stations in an effort to stimulate the use of tap water and help reduce waste from plastic water bottles. The first NS water fountain was installed in October 2018, and the project continued after the winter season. NS installed 189 water fountains in 2019, bringing the total to 241. Since the end of 2019, approximately 90% of all rail passengers in the Netherlands pass a water fountain at some point during their journey. Installed in collaboration with drinking water companies, water fountains are now available at stations in all provinces. NS is investing over €3 million in this project, which covers both installation and maintenance over the next decade.

## Voting at stations

In the provincial and European Parliament elections last year, passengers could vote at the station if they so wished. Being able to set up polling stations at train stations is important for municipalities, and for NS as part of its hospitality concept.

## Clean stations

Passengers were more positive about the cleanliness of stations: 81% gave a score of 7 out of 10 or higher in 2019, compared with 78% in the previous year. NS Stations is responsible for keeping all stations clean, regardless of which carriers stop at the station. The contracts with the parties that do the actual cleaning are based on result-driven requirements. For example, the agreement on rubbish bins at the stations is that they should never be more than three-quarters full on any given day, rather than that they should be emptied a particular number of times each day. NS has agreed with ProRail, municipalities and other contracting authorities on a required average score of at least 7 (out of 10) for daily cleaning at the stations.

## Stations undergoing renovations

On 31 August 2019, Heerlen station was officially opened after a seven-year renovation project. This was part of a complete make-over of the station area in Heerlen, with the Maankwartier district now offering an attractive combination of houses, businesses and shops, partly built over the tracks. Heerlen station now also includes a Station Living Room, inviting both NS and Arriva passengers to spend more time at the station.

At the end of May we opened a new passageway for cyclists and pedestrians near Zaandam station. This new passage, which is built over the tracks, connects the eastern and western parts of the city. We also upgraded the station, built a new entrance area and new shops have been opened.

In 2019, renovation projects were being carried out at 14 stations, including Amsterdam Amstel, Amsterdam Zuid, Maastricht, Rotterdam Alexander and Den Haag HS. Spring 2019 saw the launch of a project to restore the monumental central station of Maastricht. The building is receiving a new layout with better facilities while historic elements are being restored. The old visitors' hall, currently in use by NS, will be transformed into a Grand Café. Once the project is completed, passengers will find a station with more facilities, more light and more space. Another historic station that is being renovated is Naarden-Bussum. This station is receiving a new P+R area, expanded bicycle parking facilities and a renovated entrance area on its western side.

The renovation of the central hall of Amsterdam Amstel station began after the summer of 2019, as part of the overall redevelopment of the station and its surrounding area. The southern part of the station area in Gouda will be renovated over the next few years. The project includes two new bicycle parking facilities, a new bus station, more space for cyclists and public transport, widened pavements, a high-quality pedestrian route to the city centre and sustainable green elements in the overall design.

During certain periods of a renovation programme, the quality and atmosphere of stations may be less than the required standard, taxing our passengers' patience and understanding. We try to minimise inconvenience through targeted communication and effective signposting, but unfortunately we cannot avoid it altogether.

## Development of station areas

A world-class station requires a world-class environment; an area that accommodates passengers and their need for transport for the 'first and last mile' of their journey, as well as urban functions for all those who use the area – including residents, employees, leisure visitors and students. Redevelopment and densification of station areas will help to promote the use of public transport as a logical choice, thereby relieving pressure on other infrastructure.

In 2019, we allocated a parcel of land adjacent to Den Haag HS under a ground lease to a property developer. There are plans for a building there that incorporates homes, offices, retail outlets and catering facilities. Combined with the extended passenger tunnel and the new station square, this will result in a wholly new urban area in front of Hollands Spoor station. In Zwolle, NS Stations signed a partnership agreement for the redevelopment of the station area. In Roosendaal, NS Stations has joined forces with the local authorities to develop a vision for the area next to the station square in the centre of the town, while in Ouder-Amstel we are participating in the formulation of a vision for the development of a new urban district near Duivendrecht station.

### Building over the tracks

The technique of building over the railway tracks offers an opportunity to alleviate the shortage of urban space while also creating accessible residential areas near the railway stations. In July 2019, NS signed declarations of intent for Utrecht CS and Amsterdam Sloterdijk with the partners concerned.

In collaboration with the municipality of Utrecht, the Central Government Real Estate Agency and ProRail, we are examining possibilities to accommodate new homes, offices, energy generation facilities or green spaces through the more effective utilisation of space around and above the tracks, and how such structures over the tracks can help to remove barriers between city districts.

As far as Amsterdam Sloterdijk is concerned, NS, ProRail, the municipality of Amsterdam and Vervoerregio Amsterdam have expressed their ambition to create a modern station that is ready for the future. The four parties will soon start an exploratory study. NS is interested to find out whether the proceeds from the structure over the tracks can help finance the optimisation of the rest of the station. By mid-2020, the development strategy will be finalised and follow-up steps can be made.

## Safety at the stations

As in previous years, the safety of passengers, visitors and employees at the stations was a top priority in 2019. We use safety rounds, safety targets, incident analyses and communication initiatives to create a safety culture in which we can be open about safety risks and incidents and think about how to deal with them in our daily work. This year we included a particular focus on our commissioning role within the context of safety at our stations. We also held workshops about safe working practices, and a thematic session on the best way to deal with individuals who cause nuisance. Since the end of September 2019, the safety-related powers of our Safety & Service staff also apply in shops and amenities at and around the stations (such as bicycle parking facilities).

## Retail at the station

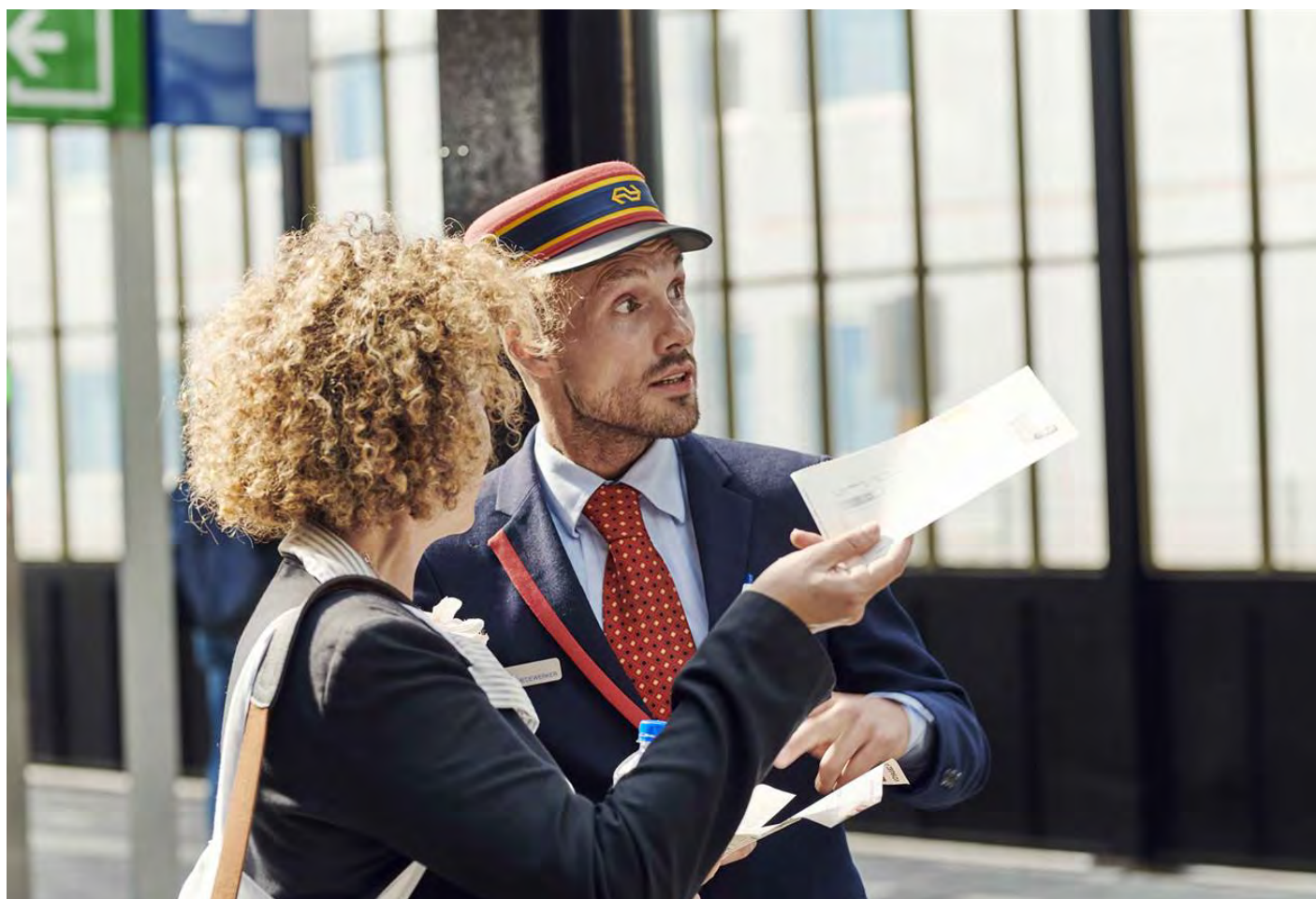
The Starbucks format was transferred to catering company SSP effective 9 January 2019, and Smullers went to Lagardère effective 1 February 2019. The rental contracts for these two formats mark the completion of the process of 'transferring retail formats to the market'. With its retail business, NS now serves customers on a daily basis through its own formats Kiosk, StationsHuis kamers (Station Living Rooms), Railcatering, Julia's, vending machines and the two franchise formats of Albert Heijn to go and Rituals. 2019 saw a particular focus on the continued development of the Railcatering and Julia's formats, optimisation and restructuring of the new concept for Kiosk and restyling the Station Living Room. Our ambition to encourage customers to make responsible choices at the stations is reflected, for example, in the new Kiosks and the experimental outlet for sustainable products set up in collaboration with AH to go at Utrecht CS. Customers have a choice of responsible items from a seasonal range produced locally and/or sustainably. The outlet features an interior made of recycled train materials and uses as little packaging material as possible to minimise waste.

### Improvements to formats

The Railcatering and Julia's formats have been improved, now featuring a revamped range of food items for the various moments of the day and a new overall look. At Julia's, passengers can compose and order their meals using a 'place your order' column or through the apps of Foodsy and Thuisbezorgd. They will then find their meal waiting for them when they arrive at the station.

In 2019, 17 Kiosk stores were converted to the new concept, which emphasises a variable range adapted to the various moments of the day, an eye for sustainability in interior design and the promotion of responsible food choices among customers. The optimisation project also involves the first stage in the roll-out of self-scanning checkouts. In addition, the 24 snack vending machines at Utrecht CS have been revamped and now allow contactless payment.

# Travelling and working in safety



Safety is our first priority: the safety of passengers, employees and the staff of the partners we collaborate with. We want to be able to openly and thoroughly discuss areas for improvement as well as the things that are going well, learn from each other and keep improving our ability to prevent incidents.

## Personal safety

Performance indicator	Realisation in 2019	Realisation in 2018	Minimum value for 2019	Target value for 2020
Customer satisfaction with personal safety on the train and at the station	90%	90%	81%	83%

In 2019, customers' perception of safety at the stations and in trains remained stable, with 90% of passengers giving a score of 7 out of 10 or higher. We took various measures over the past year that should help us maintain and if possible further improve personal safety. For example, we installed cameras and deployed Safety & Service staff and private security guards at stations where passengers feel unsafe and where crime and nuisance are a reality. We also made safety agreements with partners, launched a programme to combat graffiti on trains and at stations and worked on counterterrorism measures.

### Check-in and check-out gates

The number of stations using check-in and check-out gates has increased every year since their launch in 2014; today, the gates are in use at 76 stations. Last year, a study conducted by NS in collaboration with Statistics Netherlands revealed that the number of fare dodgers, in absolute figures, has fallen since the gates were taken into operation. The number of incidents on trains involving aggression has also decreased. The use of check-in and check-out gates may also explain, at least in part, the 9% fall in crime rates in the immediate vicinity of our stations.

### Incidents involving aggression

Incidents involving aggression have a considerable impact on the lives of the people who witness them. NS encourages staff to report all such incidents. Within NS as a whole, 678 incidents of category A aggression against staff were reported in the past year – 15% less than in 2018 (802 incidents). Many of the category A incidents involved some form of threat (268), and physical violence was recorded in 163 incidents. There were also cases of aggressive resistance (149), spitting (76), threatening with a weapon (17) and indecent assault (5). Of our uniformed staff, 745 were involved in some form of physical aggression (2018: 753).

The number of category A incidents involving aggression on the train has remained practically unchanged: 242 in 2019 compared with 243 in 2018. The number of incidents in this category at the stations has fallen by 22% (430 in 2019 compared with 553 in 2018).

Incidents are easier to control at stations. Support from Safety & Service, the police and/or emergency services can arrive on site sooner than on a moving train.

There were 168 injuries as a result of aggression against staff in 2019 (2018: 206). These were mostly minor injuries (90%). In 153 cases, this involved uniformed staff (2018: 193 cases), of whom 70 were Safety & Service staff.

## Occupational safety

Where the safety and health of staff are concerned, our aim is to prevent accidents and ensure that everyone comes home from work just as healthy as when they started work, both physically and mentally. In 2019, we mapped potential occupational safety-related risks at NS on the basis of a Risk Assessment and Evaluation, and developed an action plan aimed at mitigating the five most significant risks identified. By doing so, we have strengthened our safety processes and our safety culture and have reached Level 3 of the Safety Culture Ladder (2018: Level 2/3). The Safety Culture Ladder is a certification method aimed to assess, measure and promote safety awareness and safety-oriented working processes in businesses.

## Involvement of the Executive Board and management

The NS Executive Board and management are closely involved in the company's occupational safety policy. They have periodic discussions with their staff based on the occupational safety dashboard. During these talks they also monitor implementation of the plans arising from the risk assessment and evaluation. Executive Board members conduct 'safety walks' to get in touch with staff on a regular basis on safety and health issues in the work environment.

## Chromium-6

In early 2019, the Dutch National Institute for Public Health and the Environment (RIVM) presented the results of the hexavalent chromium investigation for the tROM reintegration project in Tilburg. In that project, people on unemployment benefit worked on trains belonging to NS and the Dutch Railway Museum at the then NedTrain workshop in Tilburg between 2004 and 2012. The parties jointly established a compensation scheme, and delegated its implementation to the municipality of Tilburg.

In 2019, the chromium-6 programme focused not just on carrying out the current work safely, but also on investigating the working conditions of NS staff in the past. This investigation is being carried out by RIVM. The hazardous materials programme focuses on working safely with hazardous substances in general and complying with occupational health & safety and environmental legislation.

Furthermore, the police are currently carrying out a criminal investigation on the instructions of the Public Prosecution Service, in which NedTrain is one of the suspects. It is not known at present what the outcome of this investigation will be.

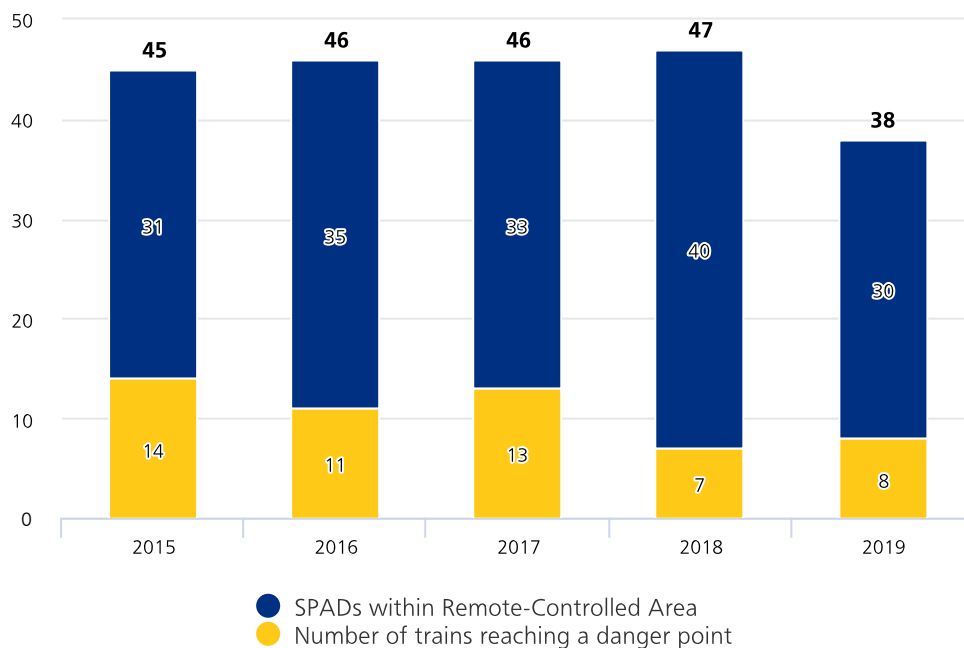
## Physical accidents

NS reports on physical accidents using the Total Recordable Rate (TRR). This concerns accidents resulting in sickness absence (including those accidents where it was possible to find replacement work), and accidents resulting in injury that had to be treated by a BIG-registered medical officer, expressed in numbers of accidents per million hours worked. This category does not include accidents caused by aggression. The TRR has fallen from 5.3 in 2018 to 4.5 in 2019. This fall must be attributed entirely to the addition of group staff and the fact that no accidents took place here.

## Railway safety

The number of SPADs was 58 in 2019 (2018: 61). Of these, 38 took place within the Remote-Controlled Area (CBG) (2018: 47). In 8 cases this involved a train reaching a 'danger point', such as a switch (2018: 9 cases). NS strives to achieve zero SPADs on the main rail network and is taking several measures to achieve that, such as introducing ORBIT and imposing a stricter braking criterion. Additionally, NS is engaged in discussions with the Ministry of Infrastructure and Water Management on the introduction of Eurobalises combined with an on-board STM box with extra functionality in connection with the roll-out of ERTMS.

## Five-year trend in SPADs within Remote-Controlled Area



## Technical and organisational measures

NS is committed to further reducing the number of SPADs and mitigating risks on the railways. To that end we take a variety of technical measures, such as ORBIT (see below) and imposing a stricter braking criterion, as well as organisational and behavioural measures based on incident-oriented and thematic studies.

In 2019, we finalised the study into the impact of innovations in the driver's cabin on work load and attention span. Eyetracking and simulation studies found no proof that the use of equipment in the driver's cabin, including tablets, results in distraction or an unduly heavy workload for the driver. The equipment was found to be applied to the drivers' satisfaction.

### ORBIT

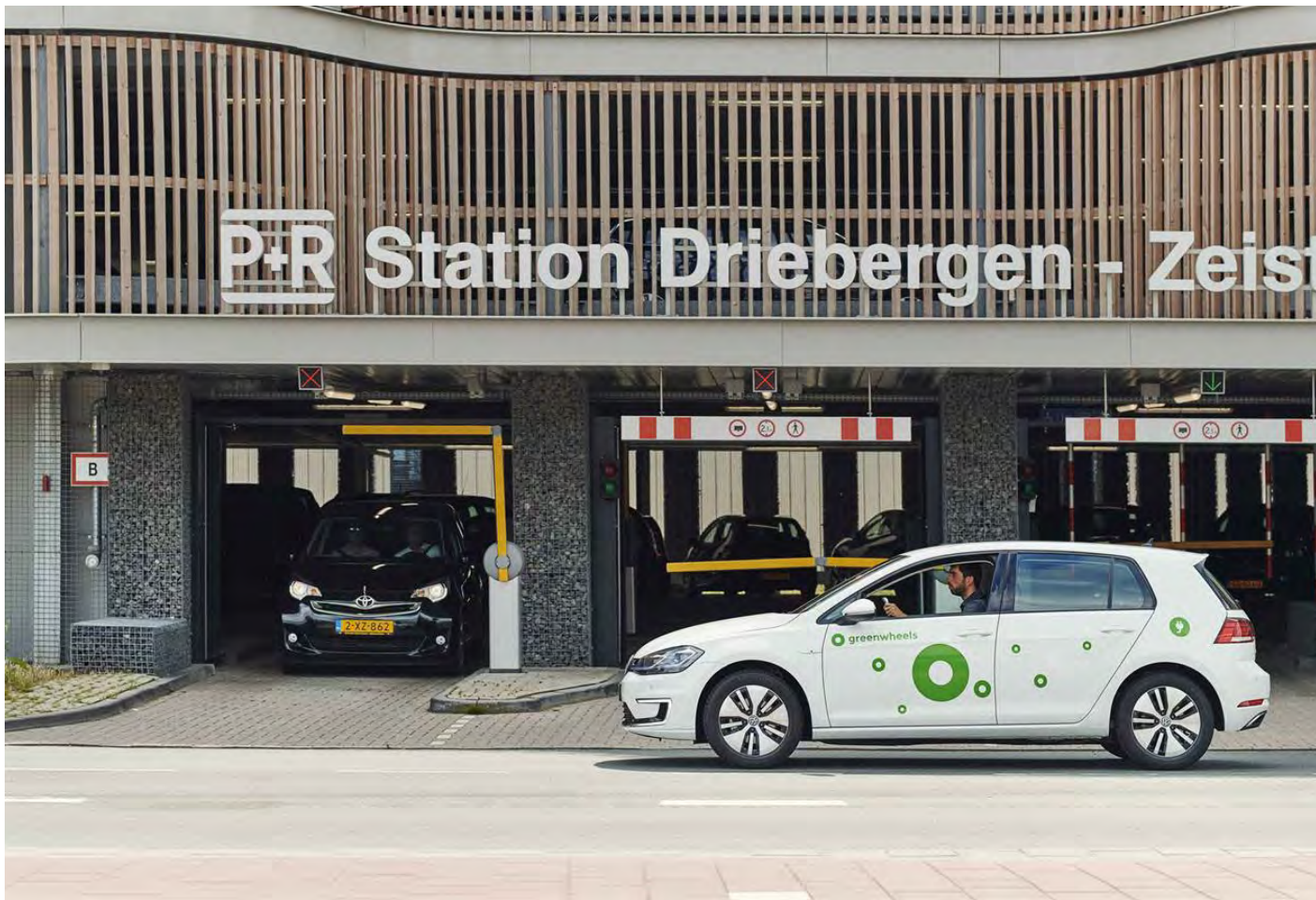
ORBIT, the system that warns drivers when they are approaching a red signal too fast, can prevent SPADs. Data from ORBIT also gives insight into high-risk situations and developments so that we can take measures to prevent an incident taking place. In 2018 and 2019, NS installed the ORBIT system on VIRM, ICM, SGM, DDZ and SLT type trains; FLIRT and SNF will follow suit in 2020. An initial analysis appears to show that ORBIT has a positive effect on the ability to prevent SPADs. We will conduct a further effectiveness analysis in 2020.

### Braking criterion

In 2017, NS decided in principle to impose a stricter braking criterion (technically enforcing more powerful braking when approaching a red signal) in IC rolling stock, starting with VIRM trains. NS also decided to impose a more stringent criterion for DDZ and ICM. We started implementing these decisions in 2019. According to current insights, the entire VIRM fleet will be subject to the stricter braking criterion in 2021.



# Performance on sustainability



Mobility offers Dutch society, and the Dutch economy, many benefits, but it comes at a cost to the environment. If mobility in this country is to be safeguarded in the longer term, we will have to make travelling more sustainable. Indeed, this is essential – for our customers, for our planet and for our future.

# Climate

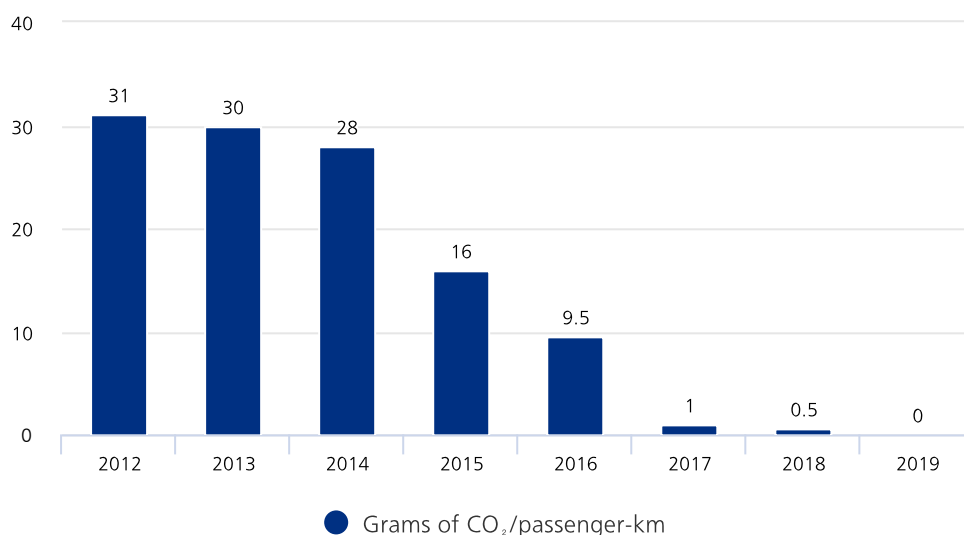
NS is one of the largest electricity consumers in the Netherlands. We use 90% of that electricity for running the trains and 10% for our buildings. In order to be able to offer climate-neutral travel for our passengers, we use energy-efficiency as a management parameter, purchase as much sustainable energy as we consume on a yearly basis, and use our assets to promote the sustainable generation of energy.

## CO<sub>2</sub> emissions down to zero: climate neutrality

Since 2017, the amount of new green electricity that we purchase, on an annual basis, equals the amount of electricity we need to run our trains. That electricity can be traced directly to new wind farms in the Netherlands, Belgium and Scandinavia. Effective 1 January 2019, we entered into a new contract for replacement bus services. Our objective is for these services to become climate neutral. As a result of start-up problems during the implementation of the contract, we managed to reduce emissions from replacement bus services by 89% at the end of the year. In the autumn of 2019, the contractor and several other parties took additional measures to ensure that the remaining 11% will be achieved in 2020.

We apply the same principle to our buildings: on an annual basis, we purchase as much green electricity as is consumed in our buildings, and 75% of the gas we buy for our buildings is green gas. In 2020, our buildings will also become fully climate-neutral.

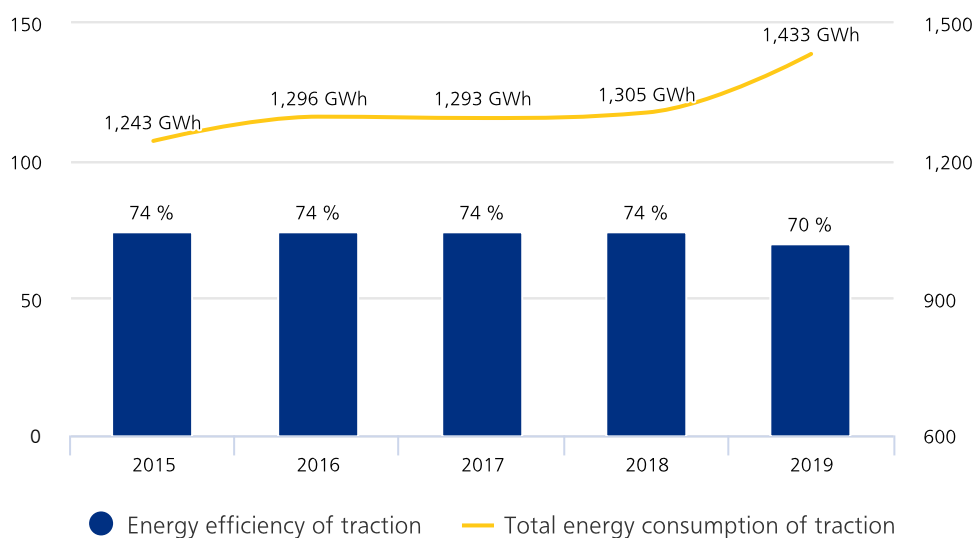
In 2019 our direct emissions (scope 1) in the Netherlands came from the gas energy consumption in our buildings. That amounted to 8,7 kilotonnes of CO<sub>2</sub> (2018: 14.1 kilotonnes), thanks to the availability of climate-neutral transport. Indirect emissions (scope 2) as a result of the consumption of heat in our buildings were 0.6 kilotonnes of CO<sub>2</sub> (2018: 0.6 kilotonnes). At the start of the franchise in 2015, CO<sub>2</sub> emissions amounted to 77 kilotonnes (scope 1) and 487 kilotonnes (scope 2) respectively. This means that we have been able to prevent over 0.6 megatonnes of CO<sub>2</sub> emissions since then.



## Energy

In 2019, an average of 67.7 Wh of energy was used per passenger-kilometre for journeys with NS. This is less than the figure for 2018 (71.3 Wh/pkm), which means we have achieved our efficiency improvement target of 2% per year by a comfortable margin. Our focus in the field of energy-efficiency is on the energy-efficient operation and shunting of trains, and on the promotion of a smart approach to energy consumption among the tenants of retail space at the stations.

NS consumes electricity (1,346 GWh), diesel (2.3 million litres), heat (33.2 TJ) and gas (6.3 million m<sup>3</sup>) as energy resources for trains, buses, stations, workshops and offices. When converted to GWh, this equates to 1,433 GWh in energy, of which 1,420 GWh is green energy. With our thermal storage system, we generate the equivalent of 20.76 GWh of heat and cold at six stations.



## Sustainable sources of energy

Space is scarce in the Netherlands. It is a challenge, therefore, to integrate facilities for the generation of sustainable energy into the existing environment. In addition to its efforts to reduce energy consumption and purchase green energy, NS aspires to contribute to the energy transition by using its buildings and land for sustainable generation. For example, in Amsterdam we have made land available to help realise the Nieuwe Hemweg wind farm. The development of this site gave rise to a partnership in which all participants shared their views on how to realise the wind farm, adjacent to a planned shunting yard. NS contributed to this project by finding solutions to allow multiple uses of the available space. Work to prepare the site for construction started in 2019. The wind farm is scheduled to become operational in 2021 and generate 40 GWh of power per year.

NS buildings in Haarlem and Eindhoven were fitted with a total of 1,851 m<sup>2</sup> of solar panels in 2019, generating 376,945 WP of installed capacity. In 2019, the gas systems of ten stations were replaced by more sustainable solutions. In collaboration with ProRail, we are examining possibilities for further increasing the number of 'natural gas free' stations and NS buildings with solar panels.

# Circularity

NS aspires to be a fully circular company by 2030. Circular purchasing is the key to circular business operations and circular trains and stations. In tendering procedures, NS includes circularity as a key consideration in plenary supplier meetings, in the selection phase and in the award criteria. For example, during the business uniforms market consultation in preparation for the tender, we sat down with some 80 suppliers to explore possibilities of further increasing the sustainability of our business uniforms. NS is also a member of Green Deal Circular Procurement, which aims to share knowledge and expertise and accelerate the circular economy.

## The circularity of our trains

We deploy our trains as efficiently as possible. Our VIRM1 double-decker trains have been in service for 20 years. We are now engaged in a project to modernise them, upgrading 86% of the old components and reinstalling them in the trains as good as new. Of the other material, 13% is put to new uses elsewhere. This means that in total, 99% of each old train is given a new lease of life (2018: 97%). For example, old train floors are turned into table-tennis tables, table-football units, acoustic phone booths and meeting cubicles. Train ceiling boards find a new use as desktops in NS offices. This allows us to keep 25 million kilogrammes of valuable materials in the cycle, enabling each new train to transport passengers for another 20 years. See the [Train Modernisation Social Impact Analysis](#) for more details about this project.

When a train has reached the end of its economic life, which is around 40 years, we explore options of renovating or selling it. If both are infeasible, we remove all the valuable components for reuse in our other trains. We also remove collector's items and sell them via the [kaNScentraal](#) foundation, an initiative launched by a group of NS colleagues to support people who need assistance. We then dismantle the train in a circular fashion.

## Sale of train materials

NS aims to retain valuable materials for higher-value reuse in the cycle. In other words, we want to move from disassembly and waste separation to recycling and upcycling. This concerns the 13% of all train components that are given a second lease of life. One of the ways we achieve that is by offering train interior parts to companies that provide sheltered employment, which turn those parts into new products. In September 2019, NS organised viewing days for the first time, allowing interested parties to view components of Sprinter (SGM) trains, which NS has been phasing out since late 2019. The viewing days revealed considerable enthusiasm for giving train components a second lease of life. The first results are already visible. For example, the interior decoration of the entrance area to the NS head office features some forty 'new' train seats from SGM Sprinter trains, and 40-year-old public announcement speakers from SGM trains are being used in bluetooth living-room speakers. Designers and manufacturers specialised in sustainable production turn our recycled materials into new products, giving them a wholly new function that makes it possible to considerably extend their useful lives. This year we continued our successful NS Upcycle Store at Utrecht CS, enabling visitors to become the proud owners of notebooks, trays and birdboxes made from old journey information displays. New items this year included felt bags (shoppers, backpacks and belt pouches) made from the upholstery of ICM train seats, and collectors' items from old trains such as brake blocks, rubbish bins and emergency brakes.

## Joining forces in the search for new applications

We have joined forces with the business community and educational institutions in the search for new recycling and upcycling opportunities. For example, we posted three circular challenges on [www.spoorlab.nl](http://www.spoorlab.nl) in 2019 to find new applications for old train materials (seats, overhead luggage racks and upholstery). We are collaborating with Windesheim University of Applied Sciences in Zwolle in a search for new applications for our thermosetting composite materials that have reached the end of their service lives. We are also involving students at The Hague University of Applied Sciences in exploring solutions for the reuse of train seats and overhead luggage racks.

## Waste at stations and on trains

In 2015, NS, ProRail and the Ministry of Infrastructure and Water Management signed the Green Deal on waste reduction and recycling. Under this deal, the signatories subscribe to the ambitious goal of reducing the amount of passenger waste by 25% in 2020 compared with 2014. Together we want to collect 75% of that waste separated so that it can be used for recycling. The participants in the Green Deal have deliberately set the bar very high, as a means of challenging each other. We do not expect to be able to actually achieve the target in 2020; however we are striving to achieve the best possible results. The Green Deal will terminate next year, and we will then report on the results attained and the lessons learned.

Various pilots conducted over the past few years have taught us a great deal about the best ways to separate waste at the stations and on our trains. Waste can only be recycled if it is sufficiently clean when collected. Paper and organic waste increasingly meet this criterion at the source, i.e. where the waste is discarded. For other types of waste at the stations, post-separation appears to be more effective. Post-separation means that valuable raw materials, such as plastics and metals, are extracted from the waste after collection, in a sorting plant. NS and ProRail are examining which combination of separation at the source and post-separation yields the best sorting results and how we can explain this to passengers and visitors in our stations.

## Reducing waste and using it as raw material

NS is encouraging its own employees and its tenants, suppliers and passengers to reduce waste. For example, we offer passengers a discount for hot drinks when they bring their own cups. This enabled us to reduce the number of disposable cups by approximately 300,000 in 2019 (as measured at NS's own retail outlets). Since the end of 2019, nearly 90% of all passengers pass a drinking water fountain at the station. Retail outlets have begun selling refillable water bottles with filtered and chilled tap water. We also ask our passengers to leave their newspapers in the luggage racks so that others can also read them, thus serving more customers with fewer newspapers.

In 2019, NS signed the Plastic Pact, an initiative of the Ministry of Infrastructure and Water Management. The pact unites parties in tackling the challenges they face when reducing and improving plastics, for example by stimulating reuse of plastics, applying recycled materials in packaging, boosting demand for recyclates, and optimising communication on waste separation.

We ran an awareness campaign in our offices, workshops and employee facilities, alerting people to the benefits of reusing coffee cups. As a result, the number of disposable coffee cups fell by more than 10% (around 10 million cups) in 2019 relative to 2018. In our Utrecht offices we also launched an initiative to collect coffee cups and recycle them into toilet paper. In this way we try to find new uses for our waste and reduce the use of disposable cups. We are also running a trial with 200 reusable cups for NS colleagues as part of the same project. These cups are designed to be brought to work and used every day. The outside is made of recycled material: each cup contains material from six used disposable

cups. This enables us to reuse discarded disposable cups and prevent waste.

We successfully started a campaign in our offices in 2019 to collect plastic bottle caps on behalf of KNGF guide dogs. We have also installed new waste separation systems and hung up waste separation guides in the refurbished office pantries. Every week, NS Train Modernisation collects 380 kilogrammes of coffee grounds for use as a raw material in an oyster mushroom cultivation facility.

## Waste recycling

Including scrap trains, NS produced around 21 million kilogrammes of waste in 2019 (2018: around 18 million kilograms excluding scrap trains). In 2019, staff at our workshops were able to separate 82% of the waste (2018: 81%). Four per cent of our waste is removed as hazardous waste annually (2018: 4%).

Of all consumer waste produced at our stations and on trains, we presented 18% as sorted waste for recycling (2018: 32%). This decrease results from our choice for an alternative, more advanced post-separation installation, which makes it possible to recycle more valuable raw materials from our waste. We first ran a trial with this system on a small part of our waste. Following that successful pilot phase, at the end of 2019 we began post-separating a large part of our residual waste. We expect to see a sharp increase in the volume of recycled consumer waste starting in early 2020 thanks to this system. We now separate more consumer waste at the source compared with 2018. Passengers can separate waste paper at 17 stations and in all trains. Our retail staff separate paper and cardboard at 70 stations. At 18 seven stations they also separate out organic waste for bio-fermentation. Part of our consumer waste was separated out at a post-separation plant.

In total in 2019, 46% of waste from our offices, workshops, stations and trains was separated and offered for recycling (2018: 45%). Ultimately our waste processing companies managed to recycle 46%, and 54% was incinerated for energy recovery. A very small fraction of our waste (0.5%) has to be dumped in landfills.

## NS: a sustainable brand

Sustainability is becoming a more and more important criterion for consumers in their purchasing decisions for both products (more than half of products bought in 2019) and services. Under the title 'Dossier Duurzaam', an external market survey shows that nearly four out of ten consumers are also prepared to pay extra for sustainability. In 'Dossier Duurzaam', NS achieved a score of 45, which has earned us 12th place in the top 50 of most sustainable businesses (2018: 11th). We have now also appeared for the first time in the top 15 of sustainable brands mentioned spontaneously by respondents. Half of all consumers in the survey were able to spontaneously mention existing sustainability initiatives of NS, with the use of green power being cited as the most important theme. Our sustainable image has a positive effect on consumers' attitudes towards NS. Over a third of respondents say that NS's sustainable business practices mean that they now are more inclined to travel by train. Less than a quarter of respondents said so last year. There is a similar upward trend when it comes to aspects such as trust, value proposition and involvement with NS. The train is considered to be the most environmentally friendly means of transport. While the electric car topped the list in earlier years, in 2019 its score for environmental friendliness was lower.

## NS's involvement in the Climate Agreement

In 2019, NS contributed to the Climate Agreement through its participation in the consultative platform for mobility issues (the *mobilitiestafel*). With a range of other organisations, we are actively contributing to reducing mobility-related CO<sub>2</sub> emissions by focusing on energy efficiency and running our trains on wind energy.

## Sustainable mobility

Employers in the Netherlands are key in the efforts to reduce mobility-generated CO<sub>2</sub> emissions. At the initiative of the Confederation of Netherlands Industry and Employers (VNO-NCW), the Ministry of Infrastructure and Water Management, environmental organisation Natuur & Milieu and NS, 15 organisations joined forces in 2015 to boost the sustainability of business travel among their employees. To that end, they formed the 'Anders Reizen' coalition. In 2019, the coalition grew to include 65 large companies and organisations, together representing more than 300,000 employees in the Netherlands. NS also participates in the Mobility Alliance, a broad coalition of parties in the Dutch automobile sector, bicycle sector, freight road transport and public transport that aims to stimulate and optimise sustainable mobility.

## Sustainable procurement

Every year, NS purchases goods and services with a value totalling more than a billion euros. In 2019 we had ties with approximately 4,300 active suppliers in 23 countries. Of our total purchasing volume, we obtain 80% from 140 suppliers; the largest share of that volume (92%) originates from the Netherlands and other countries in Western Europe. These goods and services include staff, financial and facility services, IT, construction, communication, energy, trains and transport.

Through a targeted supplier policy, NS uses its position as a purchaser to encourage suppliers to make their products and services more sustainable. As such, our suppliers contribute to our sustainability objectives. Our CSR requirements are stated in the procurement governance rules and are also embedded in our General Terms and Conditions of Purchase ([www.nsprocurement.nl/en/](http://www.nsprocurement.nl/en/)). We have also incorporated them into our Sustainable Third-Party Policy. We work closely with our suppliers and challenge them and other market players to submit innovative and sustainable bids. We used the following initiatives to steer procurement:

### Sustainable Third-Party Policy

Through our Sustainable Third-Party Policy, we focus on encouraging our suppliers to make their products and services more sustainable, inviting them to explore the following four themes with us:

- **Climate-neutral and efficient energy consumption:** we strive to purchase climate-neutral products and services through maximum energy efficiency and the use of renewable energy, preferably generated by ourselves.
- **Sustainable mobility:** we strive to achieve sustainable mobility and maximum mobility efficiency (zero emissions and use of energy generated from sustainable sources) for the transport of goods and passengers.
- **Circular use of materials:** we strive to achieve maximum circularity in the use of materials in the sector by reducing material consumption, using recycled materials and materials that can easily be recycled, prolonging the useful life of materials through optimised maintenance, renewed production and a second lease of life. In addition, we make sure that discarded materials are reused or recycled, preferably in our own processes. We also aim to keep the ownership of materials as close to the producer as possible.
- **Corporate social responsibility:** we strive to create trainee posts for people who have limited opportunities on the labour market (target: 5% of the total hours to be spent on the assignment) and to promote responsible market conduct, diversity and inclusion.

## Embedding sustainability in procurement through tendering plans

NS designs its new invitations to tender in such a way that sustainability is safeguarded. One example is the inclusion of sustainability as a criterion in the tendering plan for a European call for tenders. In the tendering plan, which describes the process steps required when preparing a call for tenders, the principles of Socially Responsible Procurement (SRP) are applied in the formulation of selection and award criteria. These criteria have been embedded in the plan since 2015. The plan also identifies opportunities for contracts that are due to expire. Once prepared, the tendering plan is discussed in the various tender boards.

## Supplier assessments and Code of Conduct

We subject our major suppliers to a Corporate Social Responsibility (CSR) assessment. This involves an assessment of their environmental impact, labour and human rights record, integrity and sustainable procurement. We have imposed the CSR assessment as a requirement since 2015 on all parties that have won an NS contract. The minimum standards that we require these suppliers to meet have steadily increased. Together with around ten major European carriers and rail suppliers, NS is working on the 'Railsponsible' method with the aim of having it accepted as the standard in the rail industry. Through our Code of Conduct, moreover, we expressly communicate to our suppliers the CSR standards and values that we apply to doing business with them.

## Supplier Code of Conduct

The Supplier Code of Conduct explicitly states the conditions we impose on suppliers who want to do business with us. One general requirement, for instance, is that the suppliers must shoulder their share of responsibility in socially aware business practices and subscribe to the principles enshrined in relevant standards, as laid down in such documents as the Universal Declaration of Human Rights and by organisations such as the ILO, OECD and ICC. NS arranges for an independent party to check whether suppliers are complying with the Code of Conduct. If the Code is not observed or if there are infringements, we first assess the risk. Then we start discussions with the supplier and ask for an improvement plan. In cases of serious violations, such as corruption, we may decide to terminate the relationship. Exclusion criteria also apply to the subcontractors engaged by our suppliers.

NS has a policy in place to prevent bribery and corruption. As part of its implementation, all purchasers within NS take an e-learning module on Ethics & Compliance, and we highlight the importance of proper observance of the policy.

## Risk management

NS recognises that the procurement of goods and services entails risks in the areas of railway safety, safety at work, information security, competition rules, continuity and supplies, liability for hired workers and vicarious liability, and sustainability. NS minimises these risks by setting specific contractual requirements and – depending on the magnitude of the risk – performing assessments to check whether the contractual agreements are being complied with. Contracts provide for the possibility of penalties or termination if the requirements are not satisfied.

## Accessibility

All our customers, and especially those with an impairment, set great store by seamless travel. That is why we are keen to make rail travel more accessible to all, every year. Since 2019, passengers can also use the NS App to apply for assistance when getting on or off a train, and we have extended travel assistance facilities to 15 more stations. In addition, 2019 saw the continued influx of Sprinter trains, which are fully accessible. They are fitted with retractable steps at the same height as the platform, allowing people with reduced mobility



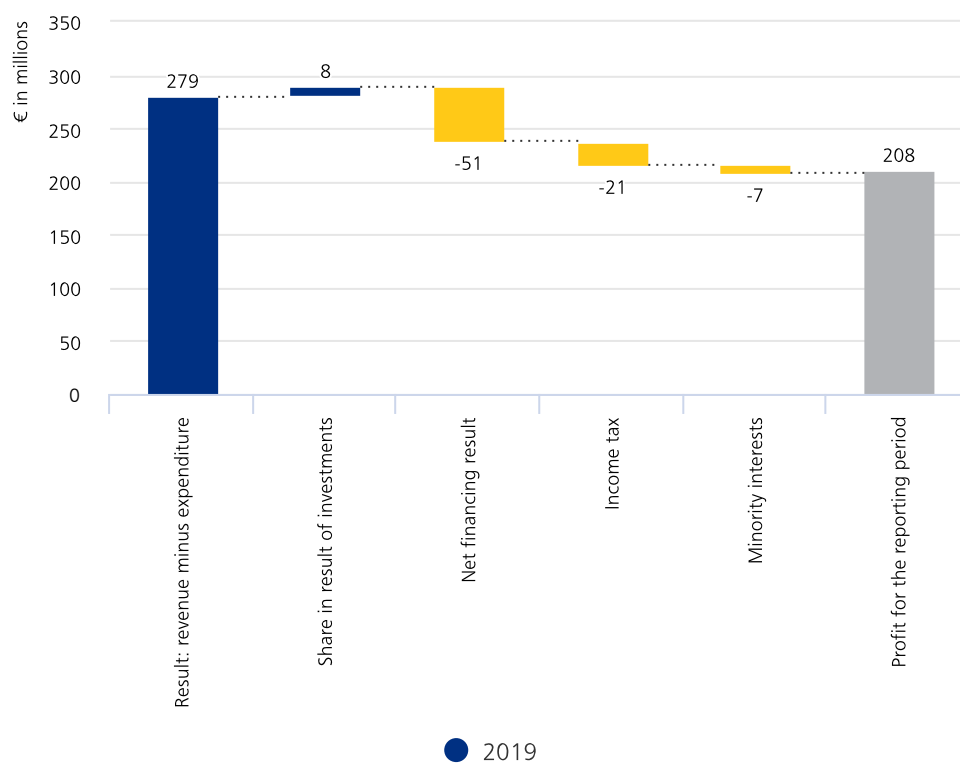
to board the train independently. In addition, Sprinter trains feature wheelchair-accessible toilets, tactile elements, assistance buttons and audio-visual signs at the doors. In 2019, we began providing assistance at our stations in preparation for a boarding assistance service for wheelchair users without the need for them to arrive on the platform 15 minutes before departure. We also introduced a 'one-more-step service' at Zwolle station, Amsterdam CS, Utrecht CS, Rotterdam CS and Den Haag CS for passengers with a visual impairment who need travel assistance. The assistant guides these people to connecting public transport, a taxi or the pick-up/drop-off site so that they can easily continue their journey. We developed the 'one-step-more' service in collaboration with the Eye Association Netherlands (Oogvereniging).

# Financial performance



NS posted revenues of €6,661 million in 2019, an increase of 12.4%. Last year, NS invested €769 million, mainly in the procurement of new trains and upgrades of existing trains. The profit from operating activities was €287 million (2018: €195 million), with an associated net profit for 2019 of €215 million (2018: €116 million). Profit from operating activities excluding exceptional income and expenditure amounted to €242 million, €37 million more than in 2018 (€205 million).

(in millions of euros)	2019	2018
Revenue	6,661	5,926
Operating expenses	6,382	5,745
	<b>279</b>	<b>181</b>
Share in result of investments accounted for using the equity method	8	14
<b>Result from operating activities</b>	<b>287</b>	<b>195</b>
Net financing result	-51	-14
<b>Result before income tax</b>	<b>236</b>	<b>181</b>
Income tax	-21	-65
<b>Profit for the reporting period</b>	<b>215</b>	<b>116</b>
Minority interests	-7	-10
<b>Profit attributable to the shareholder</b>	<b>208</b>	<b>106</b>



## Operating revenue

Revenue	2019	2018
Revenue from rail transport in the Netherlands	2,661	2,510
Station development and operation in the Netherlands	547	592
Revenue from transport operations in the United Kingdom	2,919	2,467
Revenue from rail transport in Germany	534	357
<b>Total revenue</b>	<b>6,661</b>	<b>5,926</b>

Revenue was €6,661 million in 2019 compared with €5,926 million in 2018, an increase of 12.4%. Most of this increase was generated abroad. In the United Kingdom, 9.6% organic growth and the launch of the East Midlands franchise in August 2019 (€193.1 million) caused revenues to increase substantially, by €452 million. In Germany the increase of €177 million was due principally to the launch of the Rhein-Ruhr-Express (RXX) franchise in North-Rhine Westphalia, the Dieselnetz-Sachsen-Anhalt (DISA) franchise in central Germany (December 2018) and the Stuttgarter Netz (STN) in Baden-Württemberg.

The decrease in revenues from station development and operation is largely attributable to the franchising of several retail formats including HEMA, Broodzaak, Smullers and Starbucks. This yields a drop in retail revenue and an increase in rental income.

## **Revenue in the Netherlands (€3,208 million in 2019, €3,102 million in 2018).**

### **Revenue from rail transport in the Netherlands**

Revenue from rail transport increased by 6% to €2,661 million (€2018: €2,510 million). This growth was due to the annual price indexation (1.8%) and a 3.7% growth in volume, i.e. the number of passenger-kilometres (2018: 2.4%). This growth was seen both at peak hours and off-peak hours. Broken down to class, 1st class passenger-kilometres saw the greatest relative increase in growth, resulting in higher average revenue. NS achieved higher revenues largely through more individual journeys (+7.6%) in both the social/recreational market and the commuting market. In addition, there was an increase in revenues from the sale of season tickets (+6.0%). This was due in part to the successful introduction of the NS Flex season ticket, which is used in particular by social and recreational passengers. Revenues from the business market also increased. Revenues from student public transport passes rose slightly (+2.2%), mainly as a result of an increasing number of passes for higher professional education students. The improving economic conditions (causing the number of employed people in the Netherlands, a group that is important for peak-hour travel, to grow by 1.9% in 2019), increased purchasing power, targeted marketing campaigns (aimed specifically at off-peak travel) and the introduction of NS Flex have all had a positive impact on our revenues. Revenues from international transport increased by €10 million (6.6%), mainly on services to Brussels, Berlin and Frankfurt.

### **Revenue from station development and operation in the Netherlands**

Revenue from station development and operation decreased by €45 million to €547 million in 2019. This decrease is the result of several retail formats (HEMA, Broodzaak, Smullers and Starbucks) having been awarded to third parties as a franchise, causing retail revenues to fall and rental income to rise. Adjusted for this effect, revenues went up mainly from an increase in the use of public transport bicycles (from 4.2 million rides in 2018 to 5.3 million in 2019), additional parking revenue, higher results on the sale of real estate and a like-for-like increase in retail revenues from retail formats operated by NS itself, including AH to go, Kiosk and Rituals (4%).

## **Revenue in the UK (€2,919 million in 2019, €2,467 million in 2018)**

### **Revenue from transport operations in the United Kingdom**

Revenue from rail transport in the United Kingdom provided by Abellio increased by 18.9% in 2019 (of which 10.4% represents organic growth) when denoted in GBP. This growth can be traced to the Greater Anglia, ScotRail and West Midlands franchises and to the launch, in August 2019, of the East Midlands franchise. Merseyrail, the joint venture with Serco in which Abellio has a 50% stake, recorded revenue growth of more than 10%. Revenue from bus transport in the United Kingdom provided by Abellio rose slightly by 0.8%. This includes the replacement bus services that are provided for Abellio's train companies in the United

Kingdom in the event of disruptions to the timetabled trains.

When converted into euros, the revenue was €2,919 million, an increase of €452 million on 2018 (€2,467 million). The lower average value of the British pound in 2019 compared to its average value in 2018 had a positive impact on the revenue when denoted in euros of €25.1 million.

## Revenue in Germany (€534 million in 2019, €357 million in 2018)

In Germany, Abellio generated €534 million in turnover, up €177 million compared with 2018. This growth was generated primarily by the launch of the DISA and RRX franchises, on 9 December 2018, whose full-year results were included for the first time in 2019, and the launch of the STN (Baden-Württemberg) franchise in June 2019. Including the franchises to be mobilised in 2020, turnover will grow to approximately €830 million in 2021. All franchises are the results of bids submitted until August 2016. No new franchises have been won since 2016, nor are any new bids for franchises in Germany being prepared at this moment.

## Operating expenses

(in millions of euros)	2019		2018	
	€	%	€	%
Wages, salaries and social security charges	2,125	33	1,973	34
Other personnel expenses	75	1	82	1
Staff hired in	105	2	111	2
Depreciation, amortisation and impairments	823	13	361	7
Use of raw materials, consumables and inventories	534	8	527	10
Own capitalised production	-147	-2	-154	-3
Subcontracted work and other external costs	634	10	519	9
Infrastructure levies and franchise fees	1,495	23	1,280	22
Other operating expenses	738	12	1,046	18
<b>Total operating expenses</b>	<b>6,382</b>	<b>100%</b>	<b>5,745</b>	<b>100%</b>

NS's operating expenses rose by €637 million, from €5,745 million in 2018 to €6,382 million in 2019. Of the increase in depreciation and amortisation, €422 million arises from the application of IFRS 16, according to which the rental and lease costs of lease agreements, which were recognised under other operating expenses in 2018, have been replaced by depreciation, amortisation and interest costs.

Costs have increased as a result of higher personnel expenses (€139 million), higher costs of subcontracted work (€41 million), higher depreciation and amortisation costs adjusted for IFRS 16 (€115 million), higher infrastructure levies and franchise fees (€215 million) and other operating expenses. This increase was primarily due to the start of the new franchises in the United Kingdom and Germany.

Costs in the Netherlands rose by €22 million. When adjusted for the rise in depreciation and amortisation due to investments in rolling stock, the costs decreased by €20 million.

Despite the influx of new trains (higher costs of depreciation) and the wage increase under the collective labour agreement, NS has been able to improve its result due to the increase in sales, a reduction in overhead and indirect costs, and productivity improvements in various processes as a logical consequence of good operational performance. Now that the main performance indicators and customer satisfaction levels are up to standard, the operating

result is being given a higher priority, with a view to the need to finance our investments and keep rail fares affordable. This is subject of course to the condition that our operational performance remains solid so that we continue to satisfy the franchise agreements made with the Ministry of Infrastructure and Water Management and meet our passengers' expectations.

## Wages and salaries

Wages, salaries and social security charges rose by €152 million, from €1,973 million in 2018 to €2,125 million in 2019.

Wages and salaries in the Netherlands decreased by 0.4%, as a result of the 5% decrease in the average number of FTEs which, in turn, is a consequence of retail formats having been awarded to third parties as a franchise and the decrease in the number of employees on a permanent contract within the Dutch NS organisation, due primarily to a fall in overhead and indirect staff. Personnel costs increased due to the 2.3% and 1.2% rise in wages and salaries for permanent staff under the collective labour agreement as per 1 October 2018 and 1 November 2019 respectively. The costs of hiring staff fell by €13 million (14%) compared with 2018.

In the United Kingdom, wages and salaries increased by €119 million, an increase of 16% after allowing for exchange-rate effects (€7 million). Of this increase, €46 million is attributable to the launch of the East Midlands franchise. The staff complement at East Midlands amounts to 2,396 FTEs. The wages and salaries item rose due to an increase in FTEs to 13,851 (+689) and a pay rise. At year-end 2019, Abellio UK had 16,247 FTEs (2018: 13,162).

In Germany, wages and salaries increased by €37 million to €109 million. This increase originates primarily from the launch of the DISA franchise in central Germany and the RRX franchise in North-Rhine Westphalia on 8 December 2018, and the STN franchise in Baden-Württemberg in June 2019. The number of FTEs increased by 648 to 2,676 FTEs at year-end 2019. As well as providing for a general pay rise, the collective labour agreement introduced a reduction of working hours combined with planning restrictions, resulting in a significant increase in costs.

## Subcontracted work and other external costs

Subcontracted work and other external costs increased by a total of €115 million. In the Netherlands these costs (mainly automation costs) rose by €20 million. The increase in the United Kingdom (€71 million) is attributable to the launch of the East Midlands franchise and to a delay in the delivery of new trains, which necessitated additional maintenance and refurbishment of existing stock. In Germany, costs increased by €25 million due to the launch of franchises.

## Infrastructure levies and franchise fees

The access charges for the rail infrastructure (infrastructure levy plus franchise fees) increased by a total of €215 million to €1,495 million. In the Netherlands, this item increased by 3.5% to €408 million (2018: €394 million). In the United Kingdom the costs were €856 million (2018: €741 million). This rise in the infrastructure levy concerns the ScotRail franchise in particular (€73 million), due to the transition to the new Control Period of Network Rail for 2019-2024, which entails a significant increase in costs compared with the previous Control Period. ScotRail is compensated for this by the franchising authority, Transport of Scotland. The infrastructure levy also increased (by €28 million) as a result of the

East Midlands franchise, which commenced in August 2019.

In Germany, the costs were €231 million (2018: €145 million). This increase originates from the launch of the Dieselnetz Sachsen-Anhalt (DISA) franchise in central Germany and the Rhein-Ruhr-Expres (RRX) franchise in North-Rhine Westphalia on 8 December 2018, and the Stuttgarter-Netz (STN) franchise in Baden-Württemberg in June 2019.

## Other operating expenses

Other operating expenses fell by €308 million in 2019. Due to the introduction of IFRS 16 in 2019, rental and lease costs were no longer recognised under other operating expenses in that year, but under depreciation, amortisation and interest costs. The effect of this is €345 million.

## Underlying result from operating activities

Our financial position and results need to be sound if we are to achieve our ambitions and keep train fares affordable. We should be able to achieve such healthy returns by ensuring good operational performance and high levels of customer satisfaction. This will enable us to keep investing in facilities and measures to accommodate the expected growth in passenger numbers. This is also in the public interest. The development in the underlying result from operating activities is a good yardstick for assessing whether NS is able to achieve healthy returns on its business operations. The underlying result shows the result from operating activities after eliminating exceptional items.

<b>(in millions of euros)</b>	<b>2019</b>	<b>2018</b>
<b>Result from operating activities</b>	287	195
(Of which result €55 million in 2019 and €47 million in 2018 came from foreign operations)		
Settlement of various claims	5	-4
Fyra remarketing fee	-21	0
WW II compensation	47	0
CLE mechanism	-4	21
Repayment of ACM fine received	-41	0
Miscellaneous	2	-7
<b>Underlying result from operating activities</b>	<b>275</b>	<b>205</b>
Impact of IFRS 16	33	0
<b>Underlying excluding impact of IFRS 16</b>	<b>242</b>	<b>205</b>
Of which underlying result from foreign operations, excluding impact of IFRS 16	29	62

The underlying operating (excluding the IFRS 16 effect) result rose by €37 million in 2019 to €242 million (2018: €205 million). The CLE (Correction for Central London Employment) mechanism concerns our Greater Anglia franchise agreement with the Department for Transport in the United Kingdom. The aim of the CLE mechanism is to prevent external economic factors affecting passenger revenues. The mechanism assumes an association between growing employment in central London and growing passenger revenues. However, it has become clear that in reality this association is different from how it was envisaged in the CLE mechanism. This is probably due to changes in commuter traffic and to the growing popularity of teleworking, but also to a change in the nature of jobs. This means

there is a risk that Greater Anglia, like other franchises in and around London, will have to pay more to the Department for Transport for an assumed substantial increase in passengers and sales without seeing an actual increase in the number of passengers or in revenue. The future outcomes of the CLE mechanism may have a significant effect on the future profitability of Greater Anglia.

The appeal lodged against the ACM fine that was imposed in 2017 has been successful. The court ruled that the fine was unlawful and should be refunded. NS received the refund in 2019 and added it to the result for that year. However, the ACM has appealed against this court ruling.

During the Second World War, NS operated trains on instructions from the occupying forces. A special committee chaired by Job Cohen has been tasked with handling individual compensation on moral grounds to an as yet undefined group of survivors and their direct descendants. The committee started work in January 2019 and has issued the following advice: 'Jews, Roma and Sinti who, during the Second World War and on the occupiers' instruction, were transported by NS by train to Westerbork, Vught or Amersfoort or to other locations in the Netherlands - for further transport to concentration or extermination camps with the aim of exterminating them as a population group - are eligible for individual financial compensation. Upon their death, this also applies to their direct descendants.' NS has adopted the committee's recommendation and made a provision of €47 million in 2019 to account for the expected compensatory payment and costs of execution. Given the nature of this compensation scheme, estimates of the amount required are by definition uncertain both regarding the number of survivors who are still alive and their direct descendants, and the number of them who will actually apply for compensation. In 2019, €29 was withdrawn from the provision and distributed. The provision was not recalibrated until 31 December 2019, based on the expected number of applications.

The underlying result for operations in the Netherlands rose by €70 million to €213 million (2018: €143). This improvement in the results of NS in the Netherlands can be attributed to a rise in turnover combined with a very limited rise in costs.

The underlying result from operating activities abroad decreased by €33 million to €29 million (2018: €62 million). The primary cause of this decrease was a deterioration in the performance of Abellio Germany, whose results dropped by €31 million to negative €33 million. Abellio UK managed to slightly increase its result from operating activities to €62 million.

## Net finance income

The net finance income was a negative amount of €51 million (2018: €14 million). In 2019, interest in connection with lease commitments under IFRS 16 (€37 million) is recognised under this item.

## Income tax

Corporate (income) tax was calculated on the basis of the applicable tax rates, taking account of the tax rules and the valuation of temporary differences.

The effective tax rate for the profit before corporate (income) tax was 8.9%, compared with 35.7% in 2018. The tax burden in 2019 amounted to €21 million (2018: €65 million) and can be explained as follows.



(in millions of euros)

	2019	2018		
<b>Profit before tax</b>	<b>236</b>	<b>181</b>		
Income tax based on Dutch tax rate (25%)	-59	-45		
Settlement of 2018 tax return	-1			
Effect of participating exemption	5	4		
Effect of deviating tax rates in foreign jurisdictions	10	4		
Effect of upward value adjustment to deferred tax assets due to increased future results for tax purposes in the Netherlands	-3	-		
Effect of downward value adjustment to deferred taxes due to change in rate	7	-22		
Effect of non-tax-deductible penalties, etc.	15	-4		
Effect of adding mixed costs, investment credit, etc.	5	-2		
<b>Income tax</b>	<b>-21</b>	<b>8.9%</b>	<b>-65</b>	<b>35.7%</b>

In 2019, the fine imposed by the ACM and paid in 2017 was refunded to NS; this refund is exempt from corporate (income) tax. The same applies to the remarketing fee that NS received for the sale of Fyra train sets. The downward value adjustment of deferred taxes in 2018 was made because of the government's plans to reduce the corporate (income) tax rate ultimately to 20.5% in 2021. This reduces the value of the potential tax relief for NS, necessitating a downward value adjustment of €22 million to the deferred tax assets. In 2019, the government reviewed its tax plan and changed the corporate (income) tax rate to 21.7% in 2021. As a result, the deferred tax assets increased by €7 million. The effect of deviating tax rates in foreign jurisdictions is due to our operations in the United Kingdom and Germany.

## Net profit

The net profit for 2019 was €215 million, which is €99 million higher than in 2018. This increase is attributable to the higher operating result and the lower effective tax rate. Abellio's share in the net profit decreased to a profit on its foreign operations of €4 million (2018: €21 million).

## Other tax information

Payroll tax is a tax that NS, as the employer, withholds from the salaries of its employees and then pays to the Dutch Tax and Customs Administration. NS's costs are largely subject to the high VAT rate. NS can set off the VAT that is charged against the VAT that it has to pay on its sales. Most of NS's sales are taxed at the lower VAT rate or are zero-rated. In the United Kingdom, the VAT rate on the sale of train tickets is zero. Corporate (income) tax is paid on the taxable profit. The amounts paid or received are shown in the table below, in millions of euros.

Overview of taxes per country in € million (minus sign refers to paid taxes)

	Turnover tax		Payroll tax		Corporation tax	
	2019	2018	2019	2018	2019	2018
The Netherlands	-108	-20	-425	-408	0	14
The United Kingdom	336	254	-232	-205	-10	-9
Ireland	0	0	0	0	0	-13
Germany	51	25	-13	-9	1	-4
<b>Total</b>	<b>279</b>	<b>259</b>	<b>-670</b>	<b>-622</b>	<b>-9</b>	<b>-12</b>

## Profit for the period and profit appropriation

A profit attributable to the shareholder of €208 million was recorded in 2019. A proposal will be made to pay a dividend of €73 million, equalling 35% of the profit for 2019, and to add the remaining €135 million to the reserves.

### ROE

The return on equity (ROE) increased to 5.6% in 2019 (2018: 3.0%). The ROE based on the underlying result (excluding IFRS 16) rose from 4.0% in 2018 to 4.6% in 2019. In the longer term, NS aims to achieve a benchmark return on invested capital as agreed with its shareholder, the Ministry of Finance. That benchmark return, combined with a sound financial position, will enable NS to independently obtain the necessary investment financing through the market.

## Equity and total assets

At the end of the year under review, equity was €3,781 million (2018: €3,627 million). The profit attributable to the shareholder of €208 million was allocated to the equity. The return on equity was 5.6 % in 2019 (2018: 3.0%). Solvency, at 40%, was down on the previous year (2018: 52%) due to higher total assets. The increase in total assets (€9,448 million at year-end 2019, compared with €7,030 million at year-end 2018) is due in particular to the effect of IFRS 16 as per 1 January 2019 (€2,109 million at year-end 2019).

## Investments

NS invested €769 million in 2019 (2018: €898 million), for example in New Generation Sprinter trains including a follow-up order, New Generation Intercity trains, the overhaul and modernisation of VIRM1 trains and changes to maintenance centres to facilitate the maintenance of new rolling stock. NS made joint investments with ProRail in the stations of Amsterdam-Zuid, Rotterdam Alexander and Zaandam, among others. NS is also increasingly investing in IT solutions. One strategic pillar is the transition to a data-driven organisation. This is realised in the form of a multi-year programme that provides for investments in the new data foundations on the one hand, and in data applications for e.g. logistics, personnel and passengers on the other. One example is the 'seat searcher' that gives passengers real-time information about the level of crowdedness and seat availability in the train. In addition, NS is running several long-term programmes to replace legacy systems by modern applications that provide for more agility and NS's applications landscape. For example, NS has successfully completed the replacement of the old logistics adjustment system – a critical application for our operations. We use real-time monitoring to read data from on-board sensors to help us prevent technical failures in trains at an early stage. In Apeldoorn we conducted a trial with a smart lock for public transport bicycles, in which passengers who

rented a public transport bicycle could unlock it using their OV-chipkaart. The 'Use your bank card to pay public transport fares' pilot in Leiden and The Hague was also completed successfully. NS is now preparing the roll-out of a system that allows passengers to check in and out of public transport using their bank cards or mobile phones. Moreover, the introduction of NS Flex has made it possible for consumers to travel on account.

## Financing

The net cash flow from operating activities was €1,146 million (2018: €937 million). This increase can be explained mainly by the higher result and by the rise in operating capital by €87 million (2018: €479 million). In 2019, lease expenses were recognised under cash flow from financing activities, in accordance with IFRS16. The short-term portion of the lease commitment at year-end 2019 was €433 million and was recognised under current liabilities, causing a fall in operating capital by €433 million at year-end 2019.

The cash flow from investment activities was €750 million (2018: €654 million). This concerns capital expenditure in the amount of €769 million decreased by divestments in equipment and assets owing to the franchising of retail formats (€10 million) and dividends received from our participation in Merseyrail (€9 million).

The net cash outflow from financing activities was €511 million (2018: inflow of €65 million), due to the redemption of lease commitments (€420 million) and net amounts drawn, in 2019, under a number of credit facilities totalling €54 million (2018: redemption of €73 million). In addition, a dividend of €37 million was paid to the State in 2019 (2018: €8 million).

The above resulted in a negative cash flow of €115 million (2018: positive cash flow of €348 million). Over the course of 2019, the application of IFRS 16 resulted in a shift of net cash flow from operating activities of approximately €400 million positive to net cash flow from financing activities of €400 million negative.

## Financial position

The robustness of NS's financial position is reflected in the structure and the composition of its capital, and the available cash and cash equivalents including committed credit facilities and off-balance sheet liabilities (mainly operating lease liabilities). Standard & Poor's (S&P), a leading credit rating agency that investigates the financial position of companies, has given NS Groep NV a credit rating of A+ with a stable outlook (based on an underlying credit profile of bbb+, raised by three notches given that the Dutch State is our sole shareholder). In May 2019, S&P adapted the rating from A+/Negative to A+/Stable thanks to the improved results and outlook for NS in the Netherlands. In view of the forecast growth in passenger numbers and the resulting increasing pressure on railways and stations, NS will continue investing in the coming years in trains, stations and ICT systems to make sure it can cope with the rising volumes and continue satisfying customers' demands. Based on the NS group plan and the initiatives it contains for improving results, NS expects that the available cash flows, the financing capacity and the availability of a residual value scheme for the rolling stock on the main rail network will be sufficient to support the implementation of its investment programme of approximately €3.8 billion in the period through to 2024. The realisation of these improvement initiatives will require a substantial effort from everyone at NS over the next few years.

## Key financial figures

	2019	2018
<b>Concerning the capital position</b>		
Capital base/balance sheet total*	40%	52%
Current assets/current liabilities	0.76	1
Working capital (in millions of euros)**	-861	-825
Total assets (in millions of euros)	9,448	7,030
<b>Concerning profitability</b>		
<b>Profit for the reporting period/average equity (ROE)</b>	<b>5.6%</b>	<b>3.0%</b>

\*At year-end 2019, the application of IFRS 16 caused the balance sheet to expand by approximately €2 billion due to the inclusion of User rights for property, plant and equipment, and Lease commitments. Without this expansion, the capital base/total assets would have amounted to 51% instead of 40%.

\*\*Working capital: current assets (excl. cash and cash equivalents) -/- current liabilities (excl. loans, provisions and RC credit)

## 2020 and beyond

After having achieved significant improvements in our most important KPIs, including customer satisfaction and punctuality, we will continue to focus on operational performance on the track. It is important, therefore, to maintain the high quality of our performance and improve it where possible. Furthermore, we will continue to invest in improvements for passengers, such as new trains, upgrades to trains, renovations and improvements in and around stations, and further improving and speeding up the door-to-door journey for our passengers, for example through OV-fiets and by giving passengers an overview of the entire journey. We have set up a major investment programme to achieve this and at the same time cope with the forecast growth in mobility and passenger numbers.

The fixed costs will rise further in the next few years, due to the influx of new trains and the other investments that are needed to accommodate the predicted growth in passenger numbers. The increase in costs will partly be offset by a forecast rise in sales. In addition, various measures will be implemented to improve results. There will need to be further improvements to our result over the next few years if NS is to remain able to finance all the anticipated investments independently. In addition to sustaining high levels of operational performance, we will intensify our focus on further process improvements and the smart use of data to support this, to leverage further improvements in the result alongside effective management of the overhead and indirect costs. We should also note that Brexit and the discussions with the UK Department for Transport about the CLE settlement mechanism for our Greater Anglia franchise are factors introducing uncertainty in our expected results for the United Kingdom. The same applies to the amendments to agreements with German clients on compensation for higher personnel expenses due to the shorter working week and costs of training in connection with labour market shortages, and the amendment to the penalty regime in connection with the increase in works on the tracks, such that only punctuality within our control is included in the calculation. Healthy financial management requires our full attention.

# An attractive and caring employer



NS is one of the largest employers in the Netherlands and is a strong brand in the labour market. Every day, our more than 20,000 colleagues enable people's door-to-door journeys throughout the Netherlands. Skilled and healthy employees are crucial for NS in putting our strategy into practice. We therefore see it as a high priority to maintain professional skills, develop talent and leadership and recruit talented new colleagues.

## Our employees

- At year-end 2019, the NS workforce comprised 20,074 staff (2018: 17,742 FTEs)
- Women made up 32% of the workforce at NS (2018: 33%).
- Of NS's workforce, 69% were full-time employees (male/female ratio: 82%/18%) and 31% were part-time employees (male/female ratio: 37%/63%).
- Of all NS staff, 87% had permanent contracts (2018: 84%) (male/female ratio: 91%/78%) and 13% had temporary contracts (male/female ratio: 9%/22%).
- The average age of our employees was 45 (2018: 44).
- In 2019, NS had a flexible layer with hired personnel that represented about 6.6% of the workforce.

## Recruitment

Like previous years, 2019 was characterised by a tight labour market. The number of job vacancies is increasing, unemployment figures are falling, the population is ageing and the share of young people in the labour market is declining. At the same time, jobs are changing due in part to technological developments. NS is seeing the effects of labour market shortages in its recruitment efforts in a number of regions and in crucial disciplines such as technology, IT, service and retail. NS intends to remain one of the most attractive employers in the Netherlands. We are positioning ourselves as an employer by telling people what we do, how we do it and why. In our labour market campaigns we feature a huge diversity of colleagues within NS, inviting them to explain what they believe is important in a job and how NS has helped them achieve that. We also feature the wide variety of opportunities at NS that allow our people to keep the Netherlands accessible to all and contribute to mobility in this country. To that end, we use a range of different recruitment channels, each of which is tailored to a particular target group, and we involve our own staff in finding new colleagues. We communicate with the labour market both offline and online, in a targeted fashion and centred around the following pay-off: 'Tomorrow's journey starts with you'. For each target group we have identified the elements they value most in working for NS, and we specifically highlight those elements in our campaigns.

In 2019, we were among the top 10 of Intelligence Group's ranking of favourite employers, and among the top 5 favourite employers identified by the Image Survey of *Intermediair*, a recruitment website for higher educated personnel. In addition, *Werkenbijns.nl* won the Digital Recruitment Award for best recruitment website in the Netherlands.

NS recruited over 4,000 new employees in 2019, including around 2,100 for jobs in the retail formats at the stations. In 2019, we filled 2,671 vacancies for people with vocational qualifications and 1,064 vacancies for graduates of applied and research universities (2018: 3,555 and 746 respectively). A total of 247 chief guards and 103 Safety & Service staff were hired, and 49 trainees started with us. The hiring desk filled 584 temporary positions.

## Onboarding

Effective from 2019, new employees are required to attend an onboarding programme focusing on the mission and core values of NS. The programme commences right upon the signing of the employment contract, when the new colleague receives a pre-onboarding app that is meant to both welcome and inform them. The app provides them with general information about NS as an organisation, desirable forms of behaviour, working methods and our corporate culture. When they start their duties, new colleagues are required to complete a series of e-learning modules that focus on such issues as safety and

privacy. To conclude the onboarding programme, new colleagues take part in a '100% NS' day: a monthly event which comprises a half-day of personal introductions to give new employees an idea of the course of NS and enable them to meet members of our Executive Board and other colleagues. The programme gained a score of 9.5 out of 10 among its participants.

## Diversity and inclusiveness

NS wants to be seen as an attractive employer where everyone can feel at home. To that end, we will have to ensure that our employees and managers, overall, reflect the diversity that we see in society at large. That is why NS sets great store by diversity and inclusiveness in its organisation. We encourage the recruitment and retention of women, employees from migrant communities and people with occupational disabilities. We expect our suppliers to do the same.

### Women at the top

At year-end 2019, women comprised 35% of the senior management at NS (2018: 35%). It is our ambition to achieve a higher percentage. At the end of 2019, 50% of the members of the Supervisory Board were female and the Executive Board had two female members (40%).

### People with occupational disabilities

In 2019, a total of 103 people had a 'social responsibility' job, created at NS for people with occupational disabilities (2018: 82). Most of the successful candidates for these 'social responsibility' jobs were people with a vocational or higher professional education diploma. At the end of 2019, 36 job vacancies had not yet been filled. We aim to have 200 'social responsibility' jobs by 2020 in all business units.

Last year, we also dedicated a great deal of effort to the obligation for suppliers to assign NS work to people who are at a disadvantage in the labour market or who have occupational disabilities. In this way, we want to engage our suppliers in our efforts to achieve social objectives for people with little opportunity on the labour market. We are imposing this obligation in a number of ongoing contractual agreements and in invitations to tender. We did so in 2019, for example, in contracts awarded for postal services and train cleaning.

### Employees from migrant communities

NS wants to have more staff from migrant communities in managerial positions and in the higher salary scales. In 2019, we devoted special attention to attracting and promoting members of this target group by influencing the choices made by managers in the selection process and by targeting this specific group. We are also working with a diverse recruitment team. In addition, in an internal programme for employees and managers we specifically focused on cultural differences and the need for a more inclusive work environment. NS is also taking part in a special project of the Ministry of Social Affairs and Employment that aims to promote the further integration of people from migrant communities in the labour market.

Asylum permit holders constitute a special group of employees. We are encouraging their intake for regular job vacancies and traineeships through intensive cooperation with the UAF (foundation for highly educated refugees), municipalities and other organisations. NS offered a position to six highly educated asylum permit holders in 2019, for example to take part in a work-study programme to help them gain practical experience in their own discipline. NS regularly shares lessons learned and experiences with other employers, organisations and municipalities.

## Learning at NS

NS is a business where people can develop their skills in a wide variety of positions: driving trains, providing service, ensuring safety and in shops at our stations, in IT, Finance, data analytics and a range of other specialised jobs. This huge variety of activities, positions and competences generates countless opportunities for our people, contributing to our appeal as an attractive employer.

We encourage people to continuously develop themselves and to use every opportunity to learn. This ensures that they remain mobile, widely deployable and attractive as employees on the internal and external labour markets. Jobs of the future will require a range of digital and other skills, and a flexible repertoire of behaviours and new knowledge. The development of a digital and data mindset is one important prerequisite, although existing knowledge and professional expertise will need to be retained as well. This is why the world of learning is changing fast at NS. Learning at NS is more and more grounded in practical work. We are increasing our focus on regular education. We have created agile teams and widened the range of training programmes available. In learning activities at NS, the focus is shifting from preparing people to start their duties and retaining their skills to helping them improve their performance and adapt their behaviour. The NS vision for learning has six guiding principles: you learn to perform, you direct your own learning, you learn tailored to your needs, you learn on the job, you learn continuously and learning is always within reach. NS is implementing this vision with the aim of accelerating the application of new knowledge and skills. In 2019, NS invested over €21 million in training courses and other educational activities. In total, NS staff took part in 55,148 days of group training and completed 134,819 e-learning modules.

### Lifelong learning

NS has developed a whole range of interventions to promote lifelong learning. Employees get professional information in their work via apps, practical guidance and mentoring. Mechanics, drivers and train guards receive their own vocational training, often through close cooperation with regular educational establishments. In our own NS Learning Centre, we maintain the professional knowledge of our employees by offering 10,560 different forms of learning, such as simulators, e-learning, apps, skills sheets and classroom learning methods. This range is constantly renewed. For example, we added 2,864 new training courses in 2019 alone.

Additionally, staff have an individual budget that they can use to make personal choices in facilities and activities relating to health and motivation at work.

### New forms of learning

NS is also promoting new forms of learning, with an emphasis on learning on the job and informal learning supported by technology. Examples include the My Professional Expertise App to support staff on trains with specialised information, learning circles via WhatsApp, interactive e-learning modules and assignments on the job. In addition, we make use of Virtual Reality tools and communication platforms. In 2019, we produced the first VR application for refresher training without using physical rolling stock. Exams to test the familiarity of staff with the railway network are also being digitalised. For retail staff we provide an app that adjusts the learning content and questions to the individual users and their answers. Simulators have been taken into operation at work locations in Amsterdam and Rotterdam where drivers can practice their skills in a range of situations on the main rail network.



## Focus on professional expertise

The professional skills of our drivers, chief guards, customer service employees, safety staff and mechanics remain at the heart of all our learning activities. Our basic training is the starting point, and we are increasingly involving external partners in providing it. For example, in September 2019 we entered into a partnership with MBO Amersfoort for training our chief guards. Approximately 50 train drivers joined through the Regional Training Centres in Amsterdam and Twente and STC. Within NS itself, 266 chief guards and Safety & Service staff successfully completed their basic training in 2019.

## Competition and the Railways Act

In an effort to ensure sufficient knowledge and awareness of competition rules and the Railways Act among our employees, 8,482 of them took part in one of three renewed online modules about these regulations. This training is important for every employee whose daily work involves dealing with external partners and other carriers on a policy level.

## Rolling stock technology and TechniekFabriek

In November we presented 80 vocational training diplomas to mechanics as part of the 'Web op het Spoor' programme. These were the last candidates in an eight-year programme to provide in-service training for all mechanics who did not yet have a vocational diploma. In all, 846 mechanics obtained a vocational training diploma. In anticipation of the introduction of new trains, in 2019 our mechanics completed a total of more than 13,000 train maintenance courses. At the end of 2019, 56 students were doing a two-year apprenticeship in Mechatronics at TechniekFabriek (the 'technology factory'), the institute for technical training where current and future train mechanics complete an intensive vocational programme. In September, 41 trainees from TechniekFabriek had already moved on to a job at NS.

## Moving jobs

If organisational developments have consequences for staff, NS ensures they receive assistance from an early stage in finding new employment within or outside NS. We do this to prevent redundancies among employees as much as possible. In 2019, the majority of the redundant employees found new suitable jobs within the period during which they received assistance. NS provides such guidance to staff not just as an anticipatory job mobility measure for redundant employees, but also in connection with re-integration and outplacement. The majority of re-integrating staff eventually return to NS either in their own (possibly adapted) job or in another capacity.

In addition, we focus on proactive career development for our staff. In that context, in 2019 we launched the Z!N New Style Career Coaching initiative, the purpose of which is to empower people and let them take control of their personal development and the development of their careers. Over 500 employees applied for participation of their own accord.

NS is also encouraging mobility by, for example, organising 'orientation days' and 'development positions' for staff. During one such orientation day, for example, employees were introduced to the work of their colleagues in the logistics domain. Employees in development positions spend three months gaining experience in a different working environment, further developing individually and investigating whether a career step in the chosen direction is an option.

## Employee participation

2019 was the first full year in which the NS works councils carried out their tasks in the new composition following the works council elections. During that first year they invested in training and in building constructive partnerships with management. Another key theme for the employee participation bodies in 2019 was innovation. They discussed new forms of collaboration and digital innovations. Preparations for the new strategic course of NS also demanded considerable attention during the year. The informal *thematafels*, or thematic discussion bodies, set up to cover this subject in 2018 and including employees, works councils and trade unions, finalised their task in 2019. These discussion bodies have generated a wealth of ideas on subjects such as the role of role NS in the various regions, work in the future and organisational agility.

## Employee engagement

The biennial employee engagement survey was held in 2018. No NS-wide response actions were taken in 2019, given that the results of the 2018 survey were either stable or improving across the board. However, specific activities were undertaken that are likely to further enhance employee engagement:

- NS's two largest buildings in Utrecht (in Laan van Puntenburg and at Laag Katrijne) were renovated.
- The Integrity & Compliance department rolled out several learning modules and team sessions across the country in 2019 to encourage staff to hold each other to account and discuss dilemmas in teams.
- At several operational departments, a programme was launched to highlight and provide guidance on the ways of dealing with undesirable behaviour and encouraging desired behaviour.

## Sickness absence

The sickness absence rate at NS was 6.6% in 2019 (2018: 6.0%), which signifies a further increase. This can be attributed to a variety of causes, including an ageing staff population, many years of service within the same position and little inflow of new staff. Much of the absenteeism at NS involves long-term absence. The frequency of sickness reports and the number of employees who never reported sick throughout 2019 are both close to the Dutch average. However, those that do fall ill are more likely to remain ill for a prolonged period of time (i.e. longer than six weeks). In that respect, sickness absence at NS deviates from the Dutch average: over 80% of sickness absence at NS concerns long-term absence compared with 50% for the country as a whole.

We have set up a task force to launch supplementary actions to reduce this figure and to provide additional guidance in cases of long-term absence, with additional support from the Occupational Health & Safety Office. NS also works on increasing staff employability, in cooperation with managers and staff. We do so, for example, by giving our employees preventive insight into their personal vitality and a personalised plan of action to improve it. In 2019, we also completed our investigation into the workload of the chief guard's job. The results will be discussed internally with a group of stakeholders with the aim of drafting a targeted plan of action.

# Our impact on the Netherlands



Nearly 11 million people in the Netherlands travel with NS every year, and with 1.3 million daily journeys our social impact is huge. This is reflected in areas such as mobility, safety, emissions and our expenditure. In this chapter we present a transparent account of our social impact. We will do so by expressing our positive and negative socio-economic and environmental effects in euros.

## Our impact in a nutshell

The diagram below presents the development of our impact over the past few years compared with the reference year of 2014.

In 2019, passengers travelled over 361 million more kilometres by train compared with 2018. This means that we have further improved our positive social impact on mobility and safe travel compared with private cars. The negative impact due to travel time has also increased as a result. Since rail passengers get more exercise, we have also, since 2018, calculated our positive social impact on health. That impact increased last year. Our environmental impact increased due in particular to the rise in the number of passengers. The positive impact of expenditure and education was greater because NS had a larger workforce. A new calculation method for occupational safety could not be used for previous years, so comparison is not possible.

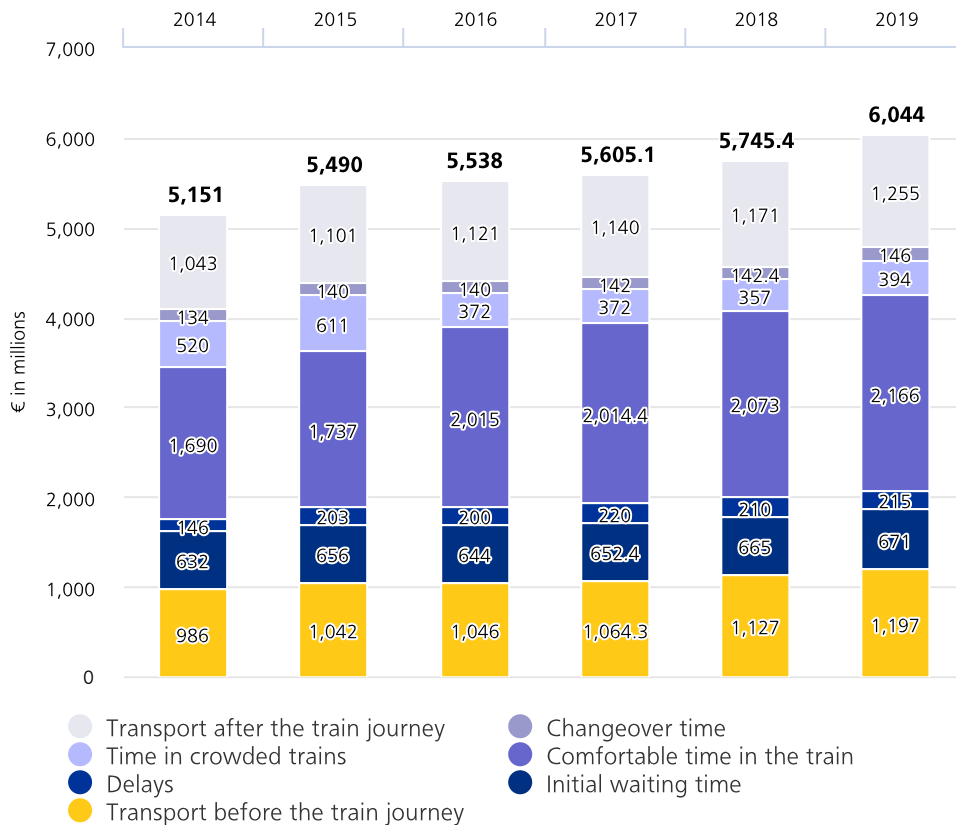
Social impact of NS	Impact in 2019 (in € million)	% relative to 2018	% relative to 2014	Impact compared with cars (in € million)	% relative to 2018	% relative to 2014
mobility	8,128	5%	14%	n/a		
expenditure	1,370	0%	10%	n/a		
training	13	9%	36%	n/a		
journey time	-6,045	5%	17%	n/a		
environment	-76	6%	-47%	301	4%	30%
health and safety	-141	7%	n/a	629	2%	15%

## Socio-economic impact of mobility and travel time

NS and the sector partners are creating socio-economic impact by providing mobility and by giving people the opportunity to travel from A to B for work, study or recreation, thereby contributing to the economy. Travelling by train also helps connect people and promotes social inclusiveness. The importance of mobility in the Netherlands has been valued by the Kennis Instituut Mobiliteit (a mobility knowledge centre) at €76 billion. Of that amount, €8,128 million can be attributed to NS (€7,776 million in 2018).

As passengers cannot spend their time in the way they wish, the door-to-door travel time results in social costs. This applies above all to time lost due to delays and to time spent in overcrowded trains (for example due to a lack of seating). This negative impact of travelling was €6,045 million in 2019 (€5,745 million in 2018). The increase in our negative impact was due to the fact that people travelled more by train. The impact of time spent travelling in crowded trains has improved substantially thanks to measures taken to deal with overcrowding. For example, we are now deploying more trains. In short, the impact analysis shows that 'time is money': for a more positive impact, the time spent on the entire journey needs to be shorter, and passengers should be able to spend time in the train efficiently and comfortably.

## Impact of parts of the trip, expressed in euros



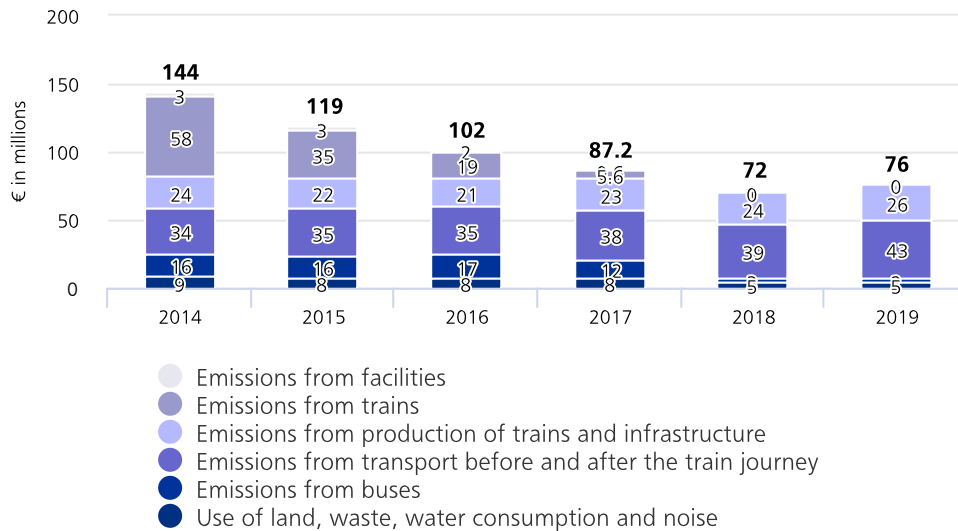
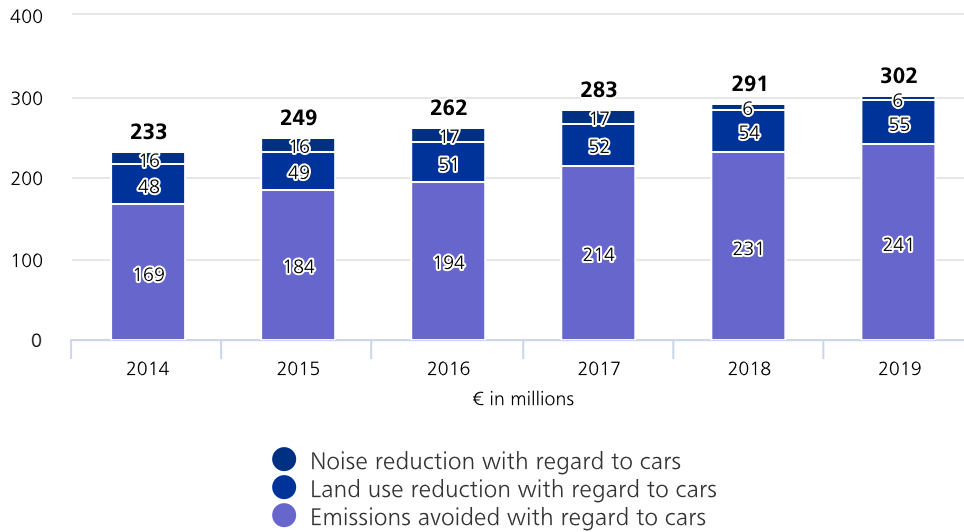
## Environmental impact: emissions, land use, waste, water and noise

Our negative environmental impact is the result of using fossil fuels, among other things. This causes air pollution due to CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub> and other emissions and particulates which have a negative impact on the climate, nature and health resulting in social costs. The use of 100% green power for trains and buildings has considerably reduced our impact over the past few years, even by 50% compared with 2014. Land use, waste, water consumption and noise nuisance also have negative environmental impacts.

Compared with the use of cars, however, travelling by train does have a positive environmental impact. Travelling by train avoids a certain amount of air pollution because pollution produced by trains – and public transport bicycles – is low compared to car journeys and alternatives for the first and last mile. The positive impact of train travel on noise and land use compared with cars consists in the roads and noise abatement measures that are not required because passengers are opting for the train. We have only calculated the positive environmental impact compared with car use for 'elective passengers', i.e. those who are willing and able to make a choice between the car and the train.

Our negative environmental impact improved by €4 million in 2019, due in particular to the increasing share of replacement buses that run on biofuels and of green gas for stations and workshops. The positive environmental impact of travel with NS compared to car use rose to €301 million as a result.

## Negative environmental impact



The negative environmental impact was €76 million in 2019 (2018: €72 million), broken down into approximately €7 million as a direct consequence of NS operations and approximately €69 million in the transport sector as a whole including the first and last mile, the manufacture of trains, plus electricity and infrastructure.

## Socio-economic impact through safety

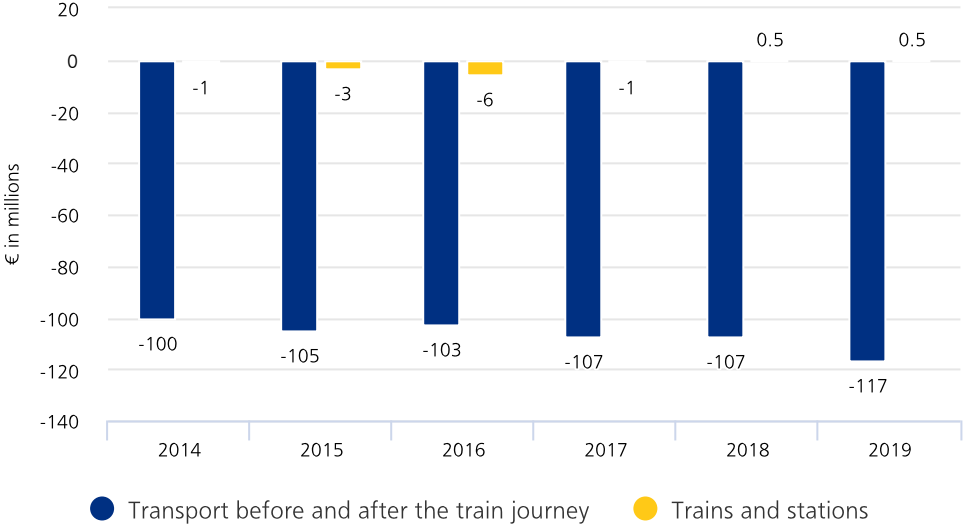
NS contributes to safety in society by providing safe transport and a safe environment to its passengers and employees. We constantly work to guarantee occupational safety, personal safety and safe travel.

The social costs of occupational safety in 2019 were €15 million. To improve occupational safety at NS, we are working on preventing physical or mental harm to our employees that may occur as a result of, for instance, unsafe working conditions, which could mean they are unable to work (or to work full-time) or need care. NS took further steps in 2019 to encourage staff to report unsafe situations and to reduce unsafe working conditions, for instance through sound risk assessment and evaluation reports.

In recent years we have taken several measures to improve personal safety, such as the use

of cameras, bodycams and security guards at stations where perception of safety is low. We cooperate closely with the police and municipalities, and with other carriers. We have made agreements with our partners to carry out joint actions to increase the level of safety. This has improved customer satisfaction with personal safety. The social impact of personal safety was just under €10 million in 2019.

**Travelling in safety**

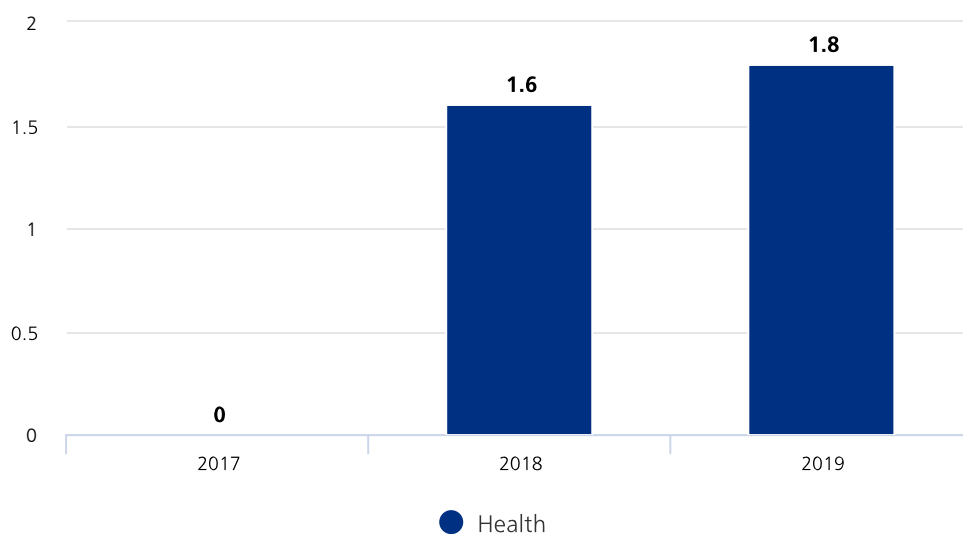


To provide safe travel, NS is working with its partners on preventing collisions, derailments and unsafe situations at the stations. The social costs were less than €0.5 million in 2019 (same as in 2018). The number of traffic accidents during the first and last mile and the impact of these accidents were much higher, amounting to approximately €117 million in 2019. Rail travel train is relatively safe compared to transport by car. The positive impact resulting from accidents that are avoided because of people actively choosing the train was only calculated for 'elective passengers'. The societal benefits of safe transport by train were approximately €629 million in 2019 (2018: €620 million).



# Socio-economic impact on health through a more active lifestyle

## Travelling healthy



Passengers who use our services become more active as a result. We calculated this socio-economic impact for the first time in 2018. Walking to and from the train or bus station makes a certain percentage of otherwise inactive people become active. NS passengers get 16 minutes of extra exercise every day. This extra exercise puts one sixth of rail passengers into the group of active people. An active lifestyle can avoid costs associated with an inactive lifestyle, including medical costs and loss of productivity. The positive impact of this in 2019 was about €1.8 million in 2019 (2018: approximately €1.6 million).

## Socio-economic impact of training, employability of staff and diversity

NS also exerts a positive socio-economic impact by developing the knowledge, skills and talents of our employees, by aiming to keep them in sustained employment, and by being a diverse and inclusive organisation.

Training programmes at NS improve the economic value of our people and their potential on the labour market after they have left NS. The societal benefits of this in 2019 were approximately €13 million, which is more than the previous year (€12 million) because the number of NS staff in the Netherlands has risen.

Incapacity for work limits the employability of employees. This entails €15.4 million in negative societal costs, for example because of higher medical costs and costs of benefit payments, and the loss of productivity and purchasing power.

## Socio-economic impact through expenditure

We also have a socio-economic impact through our own expenditure, such as procurement, investments and salaries. This means for instance that we contribute to the added value and employment opportunities of our suppliers. The economic benefits were €1,370 million of added value at suppliers (2018: €1,375 million), in the form of approximately 20,630 jobs. We are able to extend our positive societal impact yet further through sustainable procurement, e.g. for major categories of purchases such as trains (and train components),



buildings and infrastructure, IT and energy.

In addition, we have an impact on the areas surrounding our stations. This impact consists primarily of enhancing accessibility for local residents (as reflected in travel times and mobility) and the contribution to improving the living environment, for example through commercial activity around stations.

## Case study: Socio-economic impact of circular train modernisation

NS aims to achieve 100% circularity of its operations by 2030. The example below shows how we apply that ambition to our train modernisation programme.

### Socio-economic impact analysis of train modernisation

The trains of NS reach the end of their service lives after 20 years of use. We then face the choice of either buying new trains or upgrading existing trains for another 18 years of service in passenger transport. NS is currently upgrading 80 double-decker trains (VIRM1) with a total of 415 carriages, and has thus removed the need to purchase new trains.

The upgrade involves reuse of 86% of all train components, which allows us to recover more than 20 million kilos of material that would otherwise become waste. The avoided production of new materials also helps to reduce negative ecological impacts such as CO<sub>2</sub> emissions, raw material depletion and the release of substances that are harmful to the environment and to humans. As such, the reuse of train components prevents a total of 18 million euros' worth of negative ecological impacts.

### Second lease of life for VIRM1 train components

Train components that remain after the upgrade are placed in stock to ensure quick replacement of faulty parts in operational trains. We also check whether any parts could be used for other model series, as is the case with traction parts, for instance. When parts can no longer be used in trains, we find out whether they could be put to use in other applications. For example, train ceiling boards are given a second lease of life as desk tops, and train floor boards can be turned into new products such as table-tennis tables, acoustic panels and items of furniture. By keeping materials in the cycle for longer, we avoid negative ecological impacts - just as with train upgrades.

So far we have managed to give a second lease of life to 16,000 kilos of ceiling boards (as desk tops) and 156,000 kilos of floor boards (as acoustic panels and items of furniture). This has enabled us to avoid a total of 108 tonnes of CO<sub>2</sub> emissions, which equals the annual CO<sub>2</sub> uptake of a forest the size of 25 football pitches. The figure below indicates the extent to which giving a second lease of life to ceiling and floor boards helps to prevent ecological impacts by avoiding the use of new raw materials for these products. Materials that are not suitable for reuse in other applications are recycled. Examples include the processing of rubber fittings into rubber playground tiles, and the use of side walls and luggage racks for dyke reinforcement.

### Considerations when upgrading VIRM1 trains

In order to make a balanced choice between 'renovating old parts' and 'applying new parts', we take account of the tightened statutory requirements and weigh up against each other the benefits of comfort for passengers, sustainability and cost.

By making conscious choices in applying new parts in the modernisation programme, we have reduced our energy consumption by 2.7%. For example by using flush rook structures to reduce air resistance, more energy-efficient climate control systems and intelligent LED lighting in trains. This yields annual energy savings in upgraded VIRM trains that equal the average consumption of almost 450,000 households.

In addition, we have enhanced comfort for passengers by installing new seats, making the toilets wheelchair-accessible, and adding power outlets, Wi-Fi and reading lights in the luggage racks. By modernising the train interior we have also increased the number of seats, adding over ten seats per train, on average. This means that we need almost two trains less to meet the same level of demand for transport, saving €462,000 in negative ecological impacts through avoided material use.

The success of the modernisation programme for VIRM1 trains has contributed to our decision to also upgrade the 45 VIRM2/3 trains (instead of buying new trains). The first upgraded trains from this series will start running in 2021. The lessons learned will be taken into account in future modernisation programmes and decisions on the purchase of new trains. This enables us to continuously improve ourselves - with a view to the future and our ambition to keep materials in the cycle for high-grade uses for as long as possible.

# Our activities and achievements abroad

# Abellio



Abellio is a fully-owned subsidiary of NS and operates in the passenger transport markets in the United Kingdom (UK) and Germany. Abellio generated an EBIT of € 55 million and a net profit attributable to NS of € 4 million. In the UK the operation is profitable, however the circumstances remain challenging. The German market has deteriorated due to external factors which negatively influenced the results and in combination with the costs to mobilise new concessions resulted in a net loss for the year for the German operations.

(in € million)

Revenue (excl. Merseyrail joint venture)	3,454	2,824
EBIT	55	47
Net profit attributable to NS	4	23

The consolidation of Abellio consists of Abellio UK, Abellio Germany and the Dutch entity Abellio Transport Holding B.V. The holding company realised a net gain of € 6 million which mainly results from intercompany financial result relating to its activities abroad. The intercompany financial result consists of interest income on the loans and fees on guarantees as provided by Abellio Transport Holding B.V.

## Introduction

In the early 2000s, NS decided to enter the deregulated railway market via a separate subsidiary (Abellio) to prepare for the liberalisation of European markets. At the same time other European rail companies such as Deutsche Bahn (DB) and SNCF are active in the Dutch public transport market. Abellio has been active in the United Kingdom (UK) since 2002 and in Germany since 2009 and has since achieved a diversified portfolio of rail contracts in several regions in UK and Germany as well as bus services in London. The focus of Abellio is on providing reliable services to the passengers and achieving a sustainable return on invested capital which ultimately also the Dutch passenger should benefit from, for example by improving cross border connections.

2019 has been a significant year with the win and start of the East Midlands franchise in August, timetable changes, introduction of new trains and the mobilisation and start of operations for 3 new concessions in Germany. In December 2019, the Scottish government decided not to accept our proposal to extend the franchise to 2025 under certain financial conditions and subsequently exercised the break clause within the franchise agreement to end the ScotRail franchise early in March 2022. Therefore ScotRail is the earliest franchise expiry in our portfolio.

Both UK and Germany are currently difficult markets to operate in. In the UK the vote to leave EU has dominated UK politics in the past 3 years and although leaving EU on 31st of January 2020 is not expected to have a direct impact on our operations, it resulted in a slowdown in government decisions and investments relating to public transport and a lower economic growth in the past years. At this moment there are no rail bidding activities. In March 2020 the publication of findings and recommendations is expected following a review of the UK rail industry, the so-called 'Williams review', as commissioned by the UK Government in 2018. The recommendations will have an impact on future rail franchises.

The passenger rail market in Germany is still dominated by the state-owned DB. The German state and DB will invest € 86 billion up to 2030 to modernise the rail network. This causes construction works with a massive impact on both passengers and train operating companies as these works will disrupt train services and will therefore impact the punctuality of the train operators. In Germany Abellio finalised the mobilisation phase of 3 new concessions in 2019. Recruitment of new staff proved to be difficult in a tight labour market and resulted in additional recruitment and training costs. On top of that Abellio also needed to train and recruit additional staff for existing contracts due to new collective tariff agreements for staff which resulted next to higher compensation also in a lower productivity which lead to a higher need of staff as well as higher staff costs. The current subsidy indexation mechanism is not sufficient to cover for such additional staff costs. It will be key

to reach agreement with the clients (PTAs) in 2020 on a compensation for increased staff costs due to lower productivity and increased training costs as well as a fair penalty regime for infrastructure related reduction in punctuality which cannot be influenced by the operator. Without such agreements it will be difficult to realise a reasonable result in the German rail market.

## Key figures

	Abellio UK (incl. Merseyrail)	Abellio Germany
Number of employees	17,693	2,754
Revenue (€ millions)	3,154	534
Number of railway contracts	5	9
Average number of passengers per day	840,000	256,000

In 2019, Abellio achieved a revenue of € 3.69 billion, of which € 3.15 billion for Abellio UK (including joint venture Merseyrail), and € 534 million for Abellio Germany. Mainly following the addition of East Midlands in UK in August and the start of Stuttgarter Netz and S-Bahn Rhein-Ruhr in Germany in June and December respectively, the revenue has increased in 2019 by € 650 million. The total number of employees increased by 3,754 to 20,447 employees mainly due to the new contracts. With the start of these new contracts during 2019 and growth in the existing franchises, Abellio expects the revenue will further rise to approximately € 4 billion in 2020.

# Abellio's strategy



Originally Abellio was established to prepare for the liberalization of the European rail market and help NS to achieve its objectives in the Netherlands. Abellio's strategy was established on three pillars: earn, learn and prepare. Ultimately the Dutch passengers should benefit from our presence abroad. Abellio's strategic priority is to offer reliable services to our passengers and achieve sustainable financial results whilst effectively managing risks through a diversified portfolio and keeping investments at an acceptable level as agreed with our shareholder the Dutch Ministry of Finance.

All of Abellio's franchises in the United Kingdom (UK) and Germany are expected to be profitable over their contract periods. However, the rail markets in both UK and Germany are currently difficult to operate in and some restructuring of the national rail industry in both countries is anticipated to achieve better alignment between track and train, to facilitate future climate targets and growth in mobility. For future sustainable profitability of our existing contracts it is important to reach agreement with the franchising bodies to compensate for the challenges that train operating companies are facing which are beyond their control. In the UK, passenger railway contracts are tendered as net contracts, meaning that passenger revenue risk is taken by the operator and any subsidy received is calculated on costs net of revenue. In Germany, most passenger railway contracts are tendered as gross contracts, meaning that passenger revenue risk is retained by the tendering Transport Authority and any subsidy received is based on the gross costs of the contract.

In 2019 Abellio worked within the capital at risk framework which as between the Dutch Ministry of Finance and NS. With this framework NS and its subsidiary Abellio can develop foreign activities whilst balancing acceptable risks and results. The framework stipulates how much capital at risk can be invested in the UK and Germany. Foreign franchises and concessions, like Dutch activities, involve (financial) risks. The Dutch State as shareholder, represented by the Ministry of Finance, has in 2016 agreed with NS rules to limit the financial exposure in foreign activities. The core of the framework is that an upper limit has been set for the capital at risk that NS, as the parent of Abellio, may allocate for its foreign activities of Abellio. This consists of € 500 million for invested capital and issued guarantees. The total amount of invested capital and issued guarantees is € 418 million as at 31 December 2019 (31 December 2018 € 452 million). An additional limit of € 500 million applies to the bids in the United Kingdom for specific parent company guarantees that the franchise provider requires from the ultimate shareholder. These guarantees can be seen as a contingent contribution in capital which can be drawn as a subordinated shareholder loan to support activities of the franchise and to fulfil required liquidity ratios. No capital contributions or equity investments are required at the start of a franchise. Shareholder loans drawn for investments during the franchise are relatively low because investments in rolling stock are financed via operational lease transactions for the duration of the contract. The total amount of parent company guarantees is € 480 million as at 31st December 2019 (31 December 2018 € 326 million) of which an amount of € 89 million has been drawn as shareholder loans (31 December 2018 € 64 million). The increase in total parent company guarantees in 2019 regards the new franchise East Midlands which started in August 2019, indexation and an increase in the value of the British pound from 1.11 at 31 December 2018 to 1.18 at 31 December 2019.

<b>Abellio capital at risk</b>	<b>2019</b>	<b>2018</b>
(in € million)		
Equity attributable to NS	334	361
Guarantees provided by NS	84	91
<i>Called on under guarantees (NS portion)</i>	<i>21</i>	<i>9</i>
<b>Total guarantees provided &amp; equity</b>	<b>418</b>	<b>452</b>
<b>Total normal PCS guarantees provided by NS</b>	<b>480</b>	<b>326</b>
<i>PCS guarantees called on (NS portion)</i>	<i>89</i>	<i>64</i>
<b>Sum total</b>	<b>898</b>	<b>778</b>
Of which called on	110	73



# Abellio UK



## Description of the UK rail and bus market

The UK government privatised the railways in 1993. Since this time the UK franchising bodies such as the British Department for Transport (DfT) award contracts for the operations of UK rail franchises to private operators (Train Operating Companies, TOCs) for a specified period of time, typically eight to ten years. As at December 2019, there are 20 franchised TOCs operating passenger rail services in the UK. Five of the franchised operations are managed by Abellio. 13 of these franchises are let by DfT, however some franchises – including ScotRail and Merseyrail – are let by national/ regional franchising authorities.

Rail infrastructure in the UK is maintained by Network Rail which was brought back into public sector ownership in 2013. The TOCs work closely together with Network Rail to deliver safe and efficient operations. Abellio operates ScotRail under an Alliance Agreement with Network Rail Scotland, which means that the management teams work in close partnership. The purpose of the alliance is to work on specified initiatives and align priorities for both ScotRail and Network Rail in such a way that this benefits the quality of public transport in Scotland, is cost effective, and improves services for passengers.

In 1985 the UK Government removed all regulations governing bus transport outside London. This led to the privatisation of local council owned bus companies and the majority of regional bus services are now operated by the 'Big Five' (Arriva, FirstGroup, Go-Ahead Group, National Express, and Stagecoach Group). Abellio operates bus services in London, where Transport for London (TfL) is responsible for revenue, marketing and ticketing and awards concessions to operate specified bus routes to operators. Whilst passenger numbers have grown in London, there has been a dramatic reduction in bus usage across the rest of the country.

## Current market context

There has been a huge increase in demand for rail, with a doubling of passenger numbers since privatisation whilst the infrastructure is not everywhere suitable to cope with this. Many routes have been engaged in large infrastructure enhancements in the past years and continued investment in new trains with over 1,000 additional vehicles being introduced during 2019 and 2020. This investment is allowing new trains, with additional services and capacity but has resulted in timetable changes with disruption for many customers as the increased use of the tracks could not be sufficiently dealt with in all areas.

Calls for radical change of the UK rail industry, have been driven by customers' frustration at poor performance of the railway system and perceived high fares. The annual fare increases are set by the UK Government, linked to the retail price index. This process reflects the political decision taken years ago to shift the balance of the UK's rail network costs onto passengers rather than general taxpayers.

A significant proportion of punctuality issues are down to Network Rail, the already publicly owned UK infrastructure operator, with their regulator -the Office for Rail and Road – taking enforcement action in November 2018 following a decline in performance since 2015. The new CEO of Network Rail introduced a "putting passengers and freight users first" initiative that is having a positive impact on performance. During 2018 and 2019, there was also significant change in the UK Rail market with the Government taking back control of the East Coast Mainline franchise and recently of the Northern franchise, legal challenges from rail owning groups to franchise obligations in relation to pension contributions and the exit of significant operators from UK rail. The Department for Transport cancelled the franchise process for the South Eastern franchise. Industrial action impacted rail operations throughout the UK in 2019, in particular focused around the issue of driver only operation of the train doors and the role of the conductor.

Given the challenges facing UK Rail, with major shifts in customers' travelling patterns, and general customer dissatisfaction with performance following the introduction of poorly executed time table changes in certain franchises in 2018, the UK Government

commissioned a 'root and branch' review of the UK rail industry, chaired by an independent business leader Keith Williams.

In calling the Williams review, the governing Conservative Party reaffirmed its support for the principle of private sector involvement in running the railway, positioning the exercise as a practical response to challenges like fragmentation between track and train, the continued underperformance of the railway system and the impact of industrial relations issues. Abellio has made submissions to the Williams Review based on our own experience in the UK market.

It is expected that the Williams Review's findings and recommendations will be published in a Government white paper in March 2020 alongside plans for increased devolution of transport powers to Metropolitan authorities and consultation on minimum service obligations during industrial action. These reforms may re-open opportunities to bid for railway business across the UK.

In 2017, the UK Government passed the Bus Services Act, which gives some city regions the opportunity to regulate bus routes, fares and operations. Greater Manchester and other regions are consulting on moving to a bus operating model based on Transport for London's concession system. Abellio UK has developed a strategy to pursue opportunities to bid to run bus operations in a number of these city regions in England based on its experience in the London bus market.

Demand for Rail and Bus services is likely to increase as the UK Government, and devolved regional and country Governments, all pursue policies to reduce dependence on cars. A series of targets to achieve net zero carbon emissions have been set and this will likely drive demand for public transport.

## Brexit

Following the UK Parliament's inability to break the deadlock over the Brexit process an early general election was called for December 2019, which the Conservative Party won with a significant majority. Following the election, the Government passed legislation to ensure that the UK could formally leave the European Union with a withdrawal deal on 31 January 2020. During the subsequent transition period, expected to be until 31 December 2020, Britain will effectively remain in the EU's customs union and single market but it will be outside of the political institutions and there will be no British members of the European Parliament.

British Government negotiators have until year-end 2020 to agree and ratify a trade deal with the EU, after which the UK will either begin a new relationship with the EU, or exit the transition period without a trade deal in which case the UK would be faced paying tariffs on exports to the EU.

Abellio UK is active only in the UK and does not provide any international cross-border passenger rail services. All necessary licenses to operate (such as licenses from the ORR, homologation of trains) are in place and will remain in place. Brexit does not have any direct impact on Abellio UK's operations from a legal point of view, and a 'no-deal' situation will not impact the necessary licenses.

The British Pound (GBP) has fallen in value against the Euro since the Brexit vote from 1.31 in June 2016 down to 1.18 at year-end 2019, a decline of 10%. Abellio UK does not have any material exposure to foreign currencies, and so the only impact of this is the translation risk to NS. This translation risk has an impact on the translation of invested capital, balance sheet items and results into Euros.

There are potential implications from Brexit for the smooth import of new trains and spare parts and a decline in economic growth having an impact on passenger revenue and profitability. In the event of a 'no-deal' Brexit at the end of 2020 economic growth could diminish further. Contractual and other measures are in place to mitigate risk. Abellio UK is confident of achieving its ambitions through all Brexit outcomes, although a 'no deal' Brexit may hamper the growth in revenue and will have an impact on results of Abellio UK.

## Abellio UK rail and bus franchises

Abellio operates 5 UK rail franchises and around 8% of London bus services with a combined revenue of € 3.15bn (including Merseyrail). Abellio UK operates East Midlands Railway, ScotRail, Greater Anglia as a 60:40 venture with Mitsui, West Midlands as a 70:15:15 venture with Mitsui and JR East and Merseyrail as a joint venture with Serco, as well as a profitable bus business. In addition to serving the Transport for London market, the bus business provides complementary travel expertise, including a rail replacement service in case of disruption for Abellio TOCs and also for the Caledonian Sleeper franchise.

### Key figures for UK rail franchise and bus companies

Operator	Revenue (€ million)	Customer satisfaction	Punctuality	Number of stations	Number of trains/buses	Number of employees
Greater Anglia	868.0	80.5%	89.7%	136	1,172	3,089
Merseyrail	203.6	90.5%	96.4%	66	177	1,159
ScotRail	1,003.5	87.0%	88.5%	359	1,124	5,305
West Midlands	659.6	78.5%	81.3%	152	591	2,928
East Midlands	193.1	-	89.4%	91	383	2,396
Abellio London Bus	223.1	-	-	-	790	2,592
<b>Total franchises</b>	<b>3,150.9</b>	<b>-</b>	<b>-</b>	<b>804.0</b>	<b>4,237</b>	<b>17,469</b>
Abellio UK head office	3.1	-	-	-	-	224
Intercompany and Merseyrail (JV) elimination	234.6	-	-	-	-	1,159
Consolidated (excl. Merseyrail)	2,919.4	-	-	804.0	4,237	16,534

Operator	Passenger revenues (€ million)	Government contribution (€ million)	Other income (€ million)	Revenue (€ million)
Greater Anglia*	754.3		113.7	868.0
Merseyrail	65.2	111.9	26.6	203.6
ScotRail	427.6	534.7	41.2	1,003.5
West Midlands	512.0	132.6	15.0	659.6
East Midlands	181.5	11.6	-	193.1
Abellio London Bus	-	191.7	31.3	223.1
<b>Total franchises</b>	<b>1,940.6</b>	<b>982.5</b>	<b>227.8</b>	<b>3,150.9</b>
Consolidated (incl. head office, excl. JVs)	1,875.7	870.6	173.1	2,919.4

\* Greater Anglia pays a franchise fee of € 205.2m rather than receiving subsidy from the government.

## 2019 Overview

Like 2018 also 2019 has been a year of growth for Abellio UK, with the launch of East Midlands Railway on 18th August and continued growth in the existing businesses. It has also been a period of transformation with continued investment in new trains of £3.1bn across all franchises delivering more seats and services for customers as well as a modern train fleet.

In December 2019, the Scottish Government decided, to exercise the break clause within the franchise agreement to end the ScotRail franchise in March 2022. Abellio had submitted a proposal based on certain conditions for extension to 2025 which the Scottish Government has chosen not to accept. The shorter life of the ScotRail franchise brings us a new challenge but we trust that in consultation with Transport Scotland we will be able to continue to deliver good operational performance to our passengers over the remaining life of the franchise whilst preserving the long term perspective for ScotRail and Transport Scotland in the interest of the passenger.

Abellio's five TOCs (Train Operating Companies) have several years left under contract. The ScotRail franchise expiry in 2022 is the earliest with the next franchise expiry in 2025 when Great Anglia reaches its full term, assuming no extension period is agreed.

With the win of East Midlands Railway Abellio became the fourth largest UK rail owning group with 18.7% market share by rail passenger journeys.

<b>Abellio UK consolidated (in € million)</b>	<b>2019</b>	<b>2018</b>
<b>Revenue (excl. Merseyrail)</b>	<b>2,919.40</b>	<b>2,467.00</b>
EBIT before CLE and IFRS 16 effect	75.2	81.7
CLE impact Greater Anglia*	-17.5	-40.7
EBIT before IFRS 16 effect	57.7	41.0
IFRS 16 effect	23.9	-
<b>EBIT</b>	<b>81.6</b>	<b>41.0</b>
Intercompany financial result **	-13.9	-9.9
Other financial results	-19.9	-0.8
Profit before tax	47.8	30.3
Corporation tax	-9.7	-4.1
Net profit	38.1	26.2
Minority interests	-7.3	-10.2
<b>Net profit attributable to NS</b>	<b>30.8</b>	<b>16.0</b>
Net profit before IFRS 16 impact attributable to NS	31.5	16.0
Capital investments (excl. Merseyrail)	129.3	45.5
Equity attributable to NS	116.9	107.4
PCS guarantees provided by NS	480.3	326.5
Other guarantees provided by NS	84.1	59.2
<b>Total Capital at Risk, Abellio UK</b>	<b>681.3</b>	<b>493.1</b>
PCS guarantees called on (NS portion)	89.4	64.5
Other guarantees called on (NS portion)	21.3	8.6

\* In 2019 the net CLE expense, includes a benefit related to prior year reassessment of € 6m. In 2018, the net CLE expense included € 19m of charges related to prior years.

\*\* Intercompany financial result consists of interest on shareholder loans and guarantee fees.

## Operational performance

Solid operational performance is a fundamental priority for Abellio, supported by a close cooperation with Network Rail across each of our TOCs. Performance in the UK is measured using the Public Performance Measure (PPM), representing the percentage of trains that have arrived at their final destination within 5 minutes of their scheduled time – having stopped at all scheduled stations. The table below shows the PPM for 2019 and 2018 and also the number of daily train services operated by each UK rail operator.

As highlighted below, Merseyrail continues to be the best performing TOC in the UK, consistently achieving periodic PPM in excess of 95%. West Midlands Trains performance has been hit by a series of complex timetable changes in May 2019, reduced platform capacity at Euston station to accommodate HS2 construction works and industrial action over many weeks in 2019. After an initial decrease in punctuality following the timetable change in December 2018, ScotRail performance has continued to strongly improve through 2019 after changes in the May timetable and other measures and delivered the best autumn performance since the start of the franchise with a punctuality of 88.5% whilst also delivering a 23% increase in seat capacity with the introduction of new trains.

Carrier	2019	2018	Trains per day
<b>1 Merseyrail</b>	<b>96.4%</b>	<b>95.4%</b>	<b>608</b>
2 TfL Rail	95.5%	92.4%	420
3 c2c	95.0%	93.8%	385
4 LOROL	93.1%	93.7%	1,444
5 Chiltern	93.0%	92.7%	426
<b>6 Greater Anglia</b>	<b>89.7%</b>	<b>87.1%</b>	<b>1,244</b>
7 Transport for Wales	89.6%	91.2%	964
8 South Eastern	89.5%	88.0%	1,951
9 East Midlands Railway	89.4%	89.1%	476
10 Great Western	89.4%	83.2%	1,563
<b>11 ScotRail</b>	<b>88.5%</b>	<b>87.3%</b>	<b>2,365</b>
<b>Average for all TOCs</b>	<b>86.9%</b>	<b>85.7%</b>	
12 GTR	85.2%	81.7%	3,492
13 Cross Country	84.6%	83.6%	295
14 Caledonian Sleeper	82.7%	88.9%	8
15 South Western	81.7%	81.6%	1,641
16 West Midlands Trains	81.3%	85.9%	1,321
17 Northern	81.1%	80.7%	2,815
18 Avanti West Coast (formerly Virgin West Coast)	80.1%	83%	303
19 TransPennine Express	78.1%	75.4%	319
20 LNER	78.0%	73.1%	148

This table shows the performance of the UK's franchised train operating companies (MAA = Moving Annual Average) for period 10 of the railway calendar for 2019 and 2018. 13 of these operations are franchised by DfT. ScotRail and Caledonian Sleeper are franchised by Transport Scotland and Transport for Wales Rail Ltd is franchised by Transport for Wales. Merseyrail, LOROL and TfL Rail are public sector operated concessions. LNER is operated directly by DfT.

The change in PPM was influenced by a range of factors, although the majority of delays are due to delay minutes attributed to infrastructure issues.

The table below shows the cause of delays to Abellio TOCs in 2019 as attributed to the following categories:

- NR on TOC: delays attributed to Network Rail (infrastructure) on train operating companies, including extreme weather conditions.
- TOC on Self: delays attributed to a train operating company caused by themselves.
- TOC on TOC: delays attributed to a train operating company caused by other train operating companies.

	Greater Anglia	Merseyrail	Scotrail	West Midlands	East Midlands
NR on TOC	60.4%	55.1%	53.1%	54.1%	57.9%
TOC on self	29.0%	42.5%	36.6%	32.4%	21.7%
TOC on TOC	10.6%	2.4%	10.3%	13.5%	20.4%

## Customer satisfaction

Customer satisfaction with rail services is captured in the UK through the National Rail Passenger Survey (NRPS) conducted by Transport Focus. Over 50,000 rail users are surveyed each year across two survey periods in Spring and Autumn. The Abellio TOCs, with the exception of West Midlands, achieved an improvement in passenger satisfaction scores in the independent National Rail Passenger Survey (NRPS) for autumn 2019.

ScotRail is now considered the best large train operator in the UK with a passenger satisfaction of 89 per cent, a 10-point increase on the same period last year, and its highest rating among passengers since 2017. MerseyRail is rated the best franchise in the UK with a 91 per cent satisfaction score and passenger satisfaction with Greater Anglia rose to 81 per cent.

West Midlands Trains suffered a drop in satisfaction levels to 73 cent due to severe disruption since the timetable change in May 2019 which the operator is now recovering from after a remedial programme was put in place. East Midlands Railway saw a slight drop in satisfaction which is largely due to disruption caused by limited infrastructure availability for example due to local flooding after heavy rainfall.

The full 2018 and 2019 overall satisfaction results for Abellio TOCs were as follows:

	Spring 2018	Autumn 2018	Spring 2019	Autumn 2019	Actual 2019	Target 2019
Greater Anglia	76.0%	73.0%	80.0%	81.0%	80.5%	79.0%
Merseyrail	92.0%	90.0%	90.0%	91.0%	90.5%	90.0%
ScotRail	84.0%	79.0%	85.0%	89.0%	87.0%	86.0%
West Midlands	81.0%	84.0%	84.0%	73.0%	78.5%	84.0%
East Midlands	-	-	-	80.0%	n/a	n/a
<b>Average for all British TOCs</b>	<b>81.0%</b>	<b>79.0%</b>	<b>83.0%</b>	<b>82.0%</b>	-	-

## Abellio UK as an employer

Abellio UK is a major employer, employing more than 17,000 employees including Merseyrail (2018: almost 15,000). Abellio is proud of its staff, who are passionate about helping to provide seamless journeys for our passengers. In December 2019 Abellio launched Abellio for All to staff to promote Diversity and Inclusion as a core element of our HR policies.

Abellio UK is an employer operating an Equal Opportunities Policy which aims to eliminate unfair discrimination, harassment, victimisation and bullying. Abellio is committed to ensuring that all individuals are treated fairly, with respect and are valued irrespective of disability, race, gender, health, social class, sexual preference, marital status, nationality, religion, employment status, age or membership or non-membership of a trade union.

Abellio UK's policy is to continue to employ those who become disabled in service. Training is adjusted to cater for an individual disability and the disabled share the same conditions of service as other staff in relation to career development and promotion.

Abellio UK uses consultative procedures agreed with its staff and elected representatives with a view to ensuring that employees are aware of the financial and economic factors which affect our performance and prospects. In addition we issue a periodic communications to employees informing them of developments within the business.

Abellio UK participates in an annual employee survey to monitor employee satisfaction. Results are followed through using employee focus groups to understand the key issues raised in the survey. Employees make recommendations at these forums which are then developed into action plans.



## Outlook 2020

Abellio has been active in the UK since 2002, delivering robust operational and financial results and satisfied customers. Abellio UK will focus on further enhancing operational performance and realising sustainable reasonable profit as return on invested capital across the existing portfolio as a result of solid operational performance and satisfied passengers.

In 2020 Abellio UK will continue efforts to maximise the efficiency of existing contracts and seek out new opportunities, while remaining environmentally and commercially sustainable. This includes the introduction of its first fleet of all electric buses for operation in London and developing digital ticketing solutions for customers which will facilitate an easier payment method for the train journey.

In 2020 Abellio will continue the introduction of the new train fleets in ScotRail and Greater Anglia and start to introduce new trains in West Midlands and Merseyrail, while continuing the planning for the introduction of new trains in East Midlands during 2022. The UK political and economic environment remains challenging and subject to (financial) uncertainty in 2020. The most important items being the Central London Employment (CLE) mechanism in Greater Anglia, improving performance in West Midlands and in general the smooth and timely introduction of new trains without disruption for the passengers, passenger growth and industrial relations. The role of Abellio UK will be to respond to the national political agenda in relation to bus and rail and potential rail franchise reform.

Operator	Expiry date of contract	Possible extension
Greater Anglia	12 October 2025	12 October 2026
Merseyrail	20 July 2028	20 July 2033
ScotRail	31 March 2022	--
West Midlands	31 March 2026	31 March 2028
East Midlands	17 August 2027	17 August 2029

## Greater Anglia

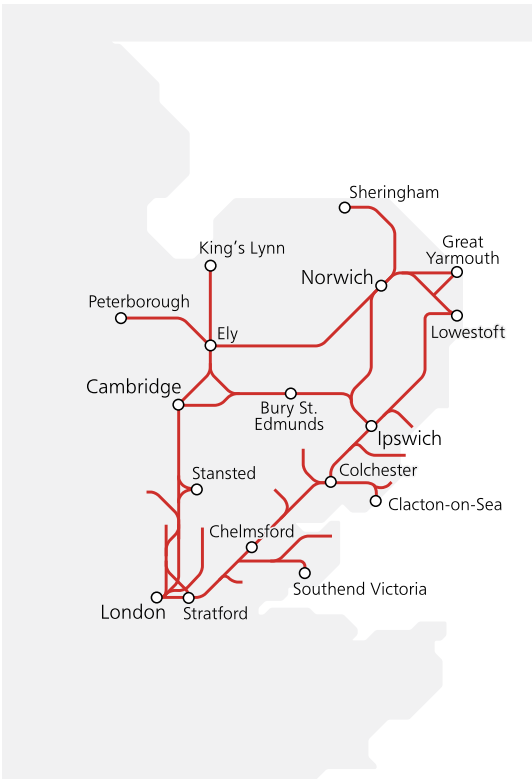
The Greater Anglia franchise began operations on 16th October 2016 for a period of 9 years. In April 2017 40% of this franchise was divested to Mitsui for an amount of £ 40 million, which also resulted in a reduction of the PCS guarantee for NS by £ 109 million. The franchise is let by the DfT and provides train services in the East Anglia region on intercity, commuter and rural networks, including services between Stansted Airport and London Liverpool Street.

In Summer 2019 Greater Anglia began the roll out of its fleet of new trains. The first bi-mode trains, manufactured by Stadler, have been well received by customers and stakeholders. As the entire fleet is being replaced, the programme will continue throughout 2020 and 2021 with further introduction of Stadler and Bombardier manufactured trains. Other highlights in 2019 included some of the best-ever operational performance on Great Eastern Main Line and Southend routes and significant timetable improvements such as the Norwich in 90-/Ipswich in 60-minute services to and from London introduced in May 2019. Greater Anglia leads the UK rail industry in customer adoption of smartcard season tickets. Over 47% of all season journeys are with a smart card. The Delay Repay 15 compensation policy was implemented early in April 2019, after proactive partnership work with the Department for Transport.

Greater Anglia remains in discussions with the Department for Transport over the impact of

the Central London Employment mechanism (CLE) and several other significant contractual matters.

The correlation between the CLE index and passenger growth is not working as intended with rising employment in London not being reflected in rising season ticket revenue. In 2019, a further CLE charge of € 17.5 million was incurred (2018: € 40.7 million).



<b>Greater Anglia (in € million)</b>	<b>2019</b>	<b>2018</b>
<b>Revenue</b>	<b>868</b>	<b>777.5</b>
EBIT before CLE and IFRS 16 effect	24.3	39.0
CLE*	-17.5	-40.7
EBIT before IFRS 16 effect	6.8	-1.7
IFRS 16 effect	5.3	-
<b>EBIT</b>	<b>12.1</b>	<b>-1.7</b>
Intercompany financial result **	-8.0	-5.1
Other financial results	-1.7	0.6
Profit before tax	2.4	-6.2
Corporation tax	-0.6	-1.2
<b>Net profit</b>	<b>1.8</b>	<b>-5.1</b>
Net profit before IFRS 16 impact	-0.3	5.1
Capital investments	71.1	26.4
Equity attributable to NS	32.4	31.5
PCS guarantees provided by NS	192.8	181.5
<b>Capital at Risk, Greater Anglia</b>	<b>225.2</b>	<b>181.5</b>
PCS guarantees called on (NS portion)	56.7	53.4

\* In 2019 the net CLE expense, includes a benefit related to prior year reassessment of € 6m. In 2018, the net CLE expense included € 19m of charges related to prior years.

\*\* Intercompany financial result consists of interest on shareholder loans and guarantee fees.

## Merseyrail

Merseyrail is Abellio's longest franchise, let by Merseytravel (a regional transport provider), for a period of 25 years from 2003. Merseyrail operates metropolitan services in and around the Liverpool region and is operated as a 50/50 joint venture with Serco.

Now in the second half of the franchise, Merseyrail is focusing on delivering 4 major projects:

1. introducing a new fleet of rolling stock,
2. continuing the roll out of smart ticketing,
3. taking more asset management from Network Rail in-house, and
4. revenue growth through targeted activities to increase patronage.

The new fleet has been publicly procured by Merseytravel and will be delivered by Stadler, coming into operation during 2020 and 2021. During 2019 Merseyrail continued to be among the top UK operators for passenger satisfaction and operational performance, and for a second consecutive year has been the best performing TOC in the UK as measured by PPM. Merseyrail also continues to deliver a robust financial performance generating an EBIT of €14.6m (50% share for Abellio).



<b>Merseyrail (based on 100%)</b>	<b>2019</b>	<b>2018</b>
(in € million)		
<b>Revenue</b>	<b>203.6</b>	<b>183.0</b>
EBIT before IFRS 16 effect	26.0	24.9
IFRS 16 effect	3.2	-
<b>EBIT</b>	<b>29.2</b>	<b>24.9</b>
Other financial results	-0.1	0.2
Profit before tax	29.1	25.1
Corporation tax	-5.9	-4.7
<b>Net profit</b>	<b>23.2</b>	<b>20.4</b>
Net profit before IFRS 16 impact	21.0	20.4
Capital investments	0.8	1.6
Equity attributable to NS	8.9	7.5
<b>Capital at Risk, Merseyrail</b>	<b>8.9</b>	<b>7.5</b>

## ScotRail

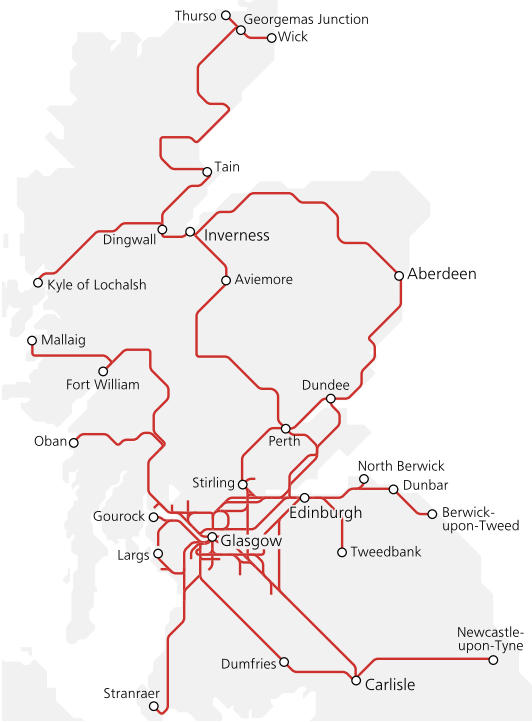
ScotRail is let by Transport Scotland (TS) and operates intercity, regional and suburban rail services across the Scottish national rail network. Abellio began operating Scotland's national railways from 1st April 2015 for a period of 10 years to March 2025. In December 2019, the Scottish Government announced that it would exercise the option in the franchise agreement to end the contract in March 2022 and not exercise the option to continue the franchise to 2025 under the contractual rebasing framework that reviews the level of subsidy required as a result of any changes in the economy and updated number of passengers and related passenger revenue forecasts compared to the level of subsidy required at the time of the bid in 2015.

Notwithstanding this announcement ScotRail will continue to closely cooperate with Network Rail with the aim to continue to deliver good services for the passengers during the

remaining life of the franchise. Abellio will work closely together with Transport Scotland with a view on the long term development of the Scottish railways.

During 2019 ScotRail has completed the introduction of 70 new electric Hitachi class 385 trains into service. During 2019 ScotRail has continued to invest in the refurbishment programme for High Speed Trains ('HSTs') with a total of 9 refurbished HSTs in operation. The HSTs operate on intercity routes between Scotland's seven cities. Across the ScotRail network, over 1,000 vehicles are now in service which is a 28% increase in carriages since the start of the franchise in 2015.

Following the December 2018 timetable changes in Scotland – the biggest change since the 1990s – there were a number of issues in the execution of the timetable which resulted in a high number of cancellations and delays in the first months of 2019. The franchise was challenged by serious delays in the completion of electrification projects by Network Rail and delays in the delivery of new and refurbished trains. As a result, training and new rostering arrangements of train crew were compromised in the run up to the new timetable launch as these had to be achieved in a very short period of time. Due to the dedication of the ScotRail employees and with the support of Abellio expertise, these performance issues have been remedied with the May 2019 and December 2019 timetable changes being well executed and customer satisfaction and punctuality measures recovering in line with a remedial plan as agreed with TS.



<b>ScotRail</b>	<b>2019</b>	<b>2018</b>
(in € million)		
<b>Revenue</b>	<b>1,003.5</b>	<b>889.2</b>
EBIT before IFRS 16 effect	-5.8	-1.4
IFRS 16 effect	8.3	-
EBIT	2.5	1.4
Intercompany financial result*	-4.0	-2.5
Other financial results	-9.5	-0.3
Profit before tax	-11	-1.4
Corporation tax	-0.8	-0.9
<b>Net profit</b>	<b>-10.2</b>	<b>-2.3</b>
Net profit before IFRS 16 impact	-8.9	-2.3
Capital investments	22.4	10.9
Equity attributable to NS	-5.2	15.2
PCS guarantees provided by NS	32.7	30.1
Other guarantees provided by NS	53.7	50.6
<b>Capital at Risk, Scotrail</b>	<b>81.2</b>	<b>95.9</b>
PCS guarantees called on	32.7	11.1

\* Intercompany financial result consists of interest on shareholder loans and guarantee fees.

## West Midlands

Abellio began operating West Midlands Trains (WMT) on 10th December 2017 for a period of 8 years and 3 months as part of a 70:15:15 venture with Mitsui and Japan Railways East. The franchise is let by Department for Transport, with oversight and reporting to the regional client, Transport for West Midlands. West Midlands Trains operates services from London Euston via Birmingham to Liverpool and across the West Midlands.

WMT is focused on delivering public transport improvements in the region, introducing over 400 new train vehicles from 2020 to 2021 which will provide space for an extra 85,000 passengers on rush hour services in Birmingham and London.

The first major timetable change was delivered in May 2019. Whilst this allowed WMT to carry an extra 150,000 passengers per week, the new timetable also brought additional operational complexity due to high usage of the critical parts in the West Midlands network and high cancellation of trains making service recovery more difficult during times of disruption. In addition to a series of signalling and track failures and industrial action over the second half of 2019, the southern end of the route has also been impacted by the closure of two platforms at Euston due to construction works on HS2. Customer satisfaction has been impacted by this drop in performance and improvement plans have been put in place to improve reliability and improve our customers' experience and additional staff will be recruited and trained. The weak operational performance and strike actions also impacted on the financial results although these remained solid in 2019.

The December 2019 timetable change has brought additional vehicles onto the network and changes have been made to remove complexity from the timetable. We will deliver further improvements and the first new CAF train introductions in May and December 2020. Abellio has also encouraged Network Rail to review the reliability of the West Coast Mainline where infrastructure failures have been impacting significantly on all rail operating companies on

this line. The measures we take to improve the performance and punctuality will take time to fully implement and will also require a financial investment by WMT in 2020. WMT have agreed an performance improvement plan with the DfT. Since the December timetable change WMT have realised a significant reduction in cancellations and punctuality on the region's main lines has gone up from an average of 78% to more than 88% in January.



<b>West Midlands (in € million)</b>	<b>2019</b>	<b>2018</b>
<b>Revenue</b>	<b>659.6</b>	<b>611.3</b>
EBIT before IFRS 16 effect	33.5	43.6
IFRS 16 effect	6.2	-
<b>EBIT</b>	<b>39.7</b>	<b>43.6</b>
Intercompany financial result*	-0.6	-1.1
Other financial results	-8.1	-0.2
Profit before tax	31.0	42.3
Corporation tax	-6.6	-8.3
<b>Net profit</b>	<b>24.4</b>	<b>34.0</b>
Minority interests	-7.3	-10.2
Net profit attributable to Abellio	17.1	23.8
Net profit before IFRS 16 impact attributable to NS	19.0	23.8
Capital investments	18.3	7.1
Equity attributable to NS	61.8	26.2
PCS guarantees provided by NS	122.0	114.9
Other guarantees provided by NS	9.1	8.6
<b>Capital at Risk, West Midlands</b>	<b>174.4</b>	<b>149.7</b>
PCS guarantees called on (NS portion)	-	-
Other guarantees called on (NS portion)	-	8.6

\* *Intercompany financial result consists of interest on shareholder loans and guarantee fees*

# East Midlands

Abellio started operating the East Midlands Railway franchise from 18th August 2019. The franchise includes long distance intercity services, linking London St Pancras International with the towns and cities of the East Midlands as well as regional services across the East Midlands, northern and central England.

On 19th August, the main launch event was held at The Roundhouse in Derby, the world's first and oldest surviving railway house and was attended by over 100 guests, reflecting the important role the railway plays in the economic prosperity of Derby and the wider East Midlands region. Further launch events were also held in Sheffield, Leicester, Nottingham and London St Pancras International.

The East Midlands franchise runs until August 2027 with a further two-year extension possible at the discretion of the Department for Transport. During this time, East Midlands Railway will deliver over £600 million of major improvements, which includes introducing brand new Hitachi bi-mode trains on the Midland Main Line. Further investment will be done to improve stations, expanded use of smart and flexible ticketing and more support for local communities.

Financial performance has been solid since the start of the franchise with the company delivering € 16.5m EBIT





<b>East Midlands (in € million)</b>	<b>2019</b>	<b>2018</b>
<b>Revenue</b>	<b>193.1</b>	-
EBIT before IFRS 16 effect	16.1	-
IFRS 16 effect	0.4	-
<b>EBIT</b>	<b>16.5</b>	-
Intercompany financial result*	-0.5	-
Other financial results	-0.6	-
Profit before tax	15.4	-
Corporation tax	-2.9	-
<b>Net profit</b>	<b>12.5</b>	-
Net profit before IFRS 16 impact	12.7	-
Capital investments	11.2	-
		-
Equity attributable to NS	7.5	-
PCS guarantees provided by NS	132.8	-
Other guarantees provided by NS	21.3	-
<b>Capital at Risk, East Midlands</b>	<b>161.6</b>	-
		-
PCS guarantees called on	-	-
Other guarantees called on	21.3	-

\* *Intercompany financial result consists of interest on shareholder loans and guarantee fees*

## Abellio UK Bus

Abellio London Bus (UK Bus) was acquired in 2009. UK Bus employs over 2,500 staff and runs 790 buses on 52 London routes as at year end 2019. This represents around 9% market share and is expected to grow as more services are won from a new depot in Southall, West London.

Abellio also operates two complementary bus services; Abellio Rail Replacement (ARR) and Event Connect. ARR provides bus services to the Greater Anglia, ScotRail, East Midlands and West Midlands franchises and to Serco's Caledonian Sleeper franchise in the event of planned and unplanned disruption. Event Connect provides bus services to events, such as major sporting events or corporate functions. This included the Solheim Cup in 2019 – a major international Golf tournament hosted in Scotland.

UK Bus continues to deliver solid financial performance, with an EBIT of € 11.1m.

<b>Abellio London Bus (in € million)</b>	<b>2019</b>	<b>2018</b>
<b>Revenue</b>	<b>223.1</b>	<b>219.3</b>
EBIT before IFRS 16 effect	9.2	7.7
IFRS 16 effect	1.9	-
EBIT	11.1	7.7
Other financial results	-1.9	0.1
Profit before tax	9.2	7.8
Corporation tax	-2.8	-0.9
<b>Net profit</b>	<b>6.4</b>	<b>6.9</b>
Net profit before IFRS 16 impact	6.8	6.9
Capital investments	5.6	1.0
Equity attributable to NS	21.8	34.4
<b>Capital at Risk, Abellio London Bus</b>	<b>21.8</b>	<b>34.4</b>

# Abellio Germany



## Description of the German rail market

The German passenger rail market is split into Regional and Long Distance. The rail infrastructure in Germany is maintained by DB Netz, subsidiary of Deutsche Bahn (DB). Abellio Germany is currently active in the regional passenger rail market which is still dominated by the state-owned Deutsche Bahn (DB Regio). The German regional rail market has a revenue volume of about € 11.1 billion per year and a network covering roughly 673 million train-kilometres per year and has been deregulated since 2003, with responsibility for the organisation of the regional rail market assigned to the 16 federal states of Germany. Each state has its own way of managing its regional market. This has led to the creation of 27 regional passenger transport authorities (PTAs), each of which can adopt a different tendering regime, with a substantial flow of potential concessions.

The Federal Government aims to achieve the 2030 climate targets and will make rail travel more attractive. The goal is to double the number of rail passengers until 2030. An important prerequisite for this is the implementation of the "Deutschlandtakt", a logistics plan that will see trains run between major cities every half hour. With the Deutschlandtakt, a new, transparent principle of expansion and capacity management for the rail network will be established. Therefore the German state and Deutsche Bahn will invest € 86 billion by 2030 to modernise the rail network. This will increase the performance capacity of rail infrastructure. That causes lots of construction works in the next years with massive impact on both passengers and train operating companies. To put Deutsche Bahn in a position to be able to modernise, expand and electrify the rail network and train system, the German state will increase its equity participation in Deutsche Bahn with an additional € 1 billion annually from 2020 to 2030 (€ 11 billion in total). According to Mofair - Alliance for fair competition in rail passenger transport the capital increase of Deutsche Bahn runs the risk of "massive competitive distortions", because there can be no assurance that these funds will be exclusively directed towards infrastructure. Mofair expressed concerns to the Federal Government and the Commission of the European Union.

With the increase of the Government funding for local and regional passenger rail services ("regionalisation funds") from 2020, the Federal Government will support the financing of local transport and thus implement another project from the climate package. By means of this additionally provided by the federal government, the 16 federal states have the possibility to order more public transport, making rail services more attractive and thereby increase the number of passengers. It is not yet determined how much of the additional resources will be made available for the regional rail passenger services and how much for example for the infrastructure.

Challenges and projects in the German rail industry exist in the following areas:

- Significant improvement of operational quality and punctuality,
- Digitisation and automation of railway operations;
- Evaluating and changing (existing) transport contracts and the services agreed therein;
- Implement a concept for infrastructure maintenance and renewal with a minimal disruption in timetables.

In Germany, Abellio only has gross contracts with the PTAs, which means that Abellio Germany is paid for its service per train kilometre. The revenue/ fare box risk is allocated to the PTA. On top, inflation risk of certain costs (e.g. employee costs and energy costs) is hedged by indexation formulas in the contracts with the PTAs. Thus, the risk profile of gross contracts is relatively low if operational performance is solid. However, reduction of working hours and additional restrictions for the employer in planning working hours as well as the option for the employee to choose for a wage raise or additional vacation days in new tariff agreements, is resulting in the need for more employees (mainly train drivers and conductors). The resulting cost increase is not properly hedged in the inflation and employee

cost index. A workgroup within the PTA- association BAG/SPNV is discussing an adjusted index that properly compensates for the additional staff costs. Due to low unemployment rates in Germany it is difficult in many businesses to find sufficient skilled employees, which results in higher recruitment and training costs. Together with the high level of track works, the lack of frontline staff resulted in increased penalties (lower subsidies) from the PTAs for lower punctuality and train cancellations. It will be crucial for the future of Abellio Germany to solve the issues in the German rail industry regarding the index and non-influenceable reduction in punctuality together with the PTAs and the federal governments. If no solution will be found it will be difficult to realise a reasonable profitable result for the German operations. Based on the current conversations with PTAs we expect to achieve a satisfactory outcome.

Abellio Germany has finalised mobilisation and started operation of 3 new concessions in 2019, being the Ruhr-Sieg Netz 2 (RSN II) and S-Bahn-Rhein-Ruhr (SBRR) in North Rhine-Westphalia and the Stuttgarter Netz (STN) in Baden-Württemberg. Due to the delayed delivery of trains by the manufacturer Bombardier, replacement concepts had to be implemented at STN resulting in a high level of complexity in operations and low punctuality. Only when all trains have been delivered by Bombardier the target punctuality can be achieved.

Late 2018 the decision has been made to adjust our bidding strategy and bid only for opportunities that are well connected to our current operations with real synergy potential and preferably with cross-border opportunities to the Netherlands. However, before we will participate in new bids we will need clarity whether the conversations with our PTAs will indeed lead to a satisfactory outcome with an outlook of a sustainable operation.

## **Abellio Germany rail concessions**

In Germany, Abellio now operates in 4 regions, together operating 9 concessions. In North Rhine-Westphalia (NRW) it operates with Abellio Rail Nordrhein-Westfalen GmbH 5 rail concessions, being S-Bahn Rhein-Ruhr, Ruhr- Sieg-Netz, Der Müngstener, Niederrhein-Netz (NRN) and the Rhein-Ruhr-Express (RRX). In North Rhine-Westphalia and Lower Saxony it operates with WestfalenBahn GmbH the Emsland- und Mittelland-Netz concession. In Mitteldeutschland it runs with Abellio Rail Mitteldeutschland GmbH the Saale-Thüringen-Südharz Netz (STS ) and the Dieselnetz Sachsen-Anhalt (DISA). In southern Germany (Abellio Rail Baden-Württemberg GmbH) lot 1 of the Stuttgarter Netz (STN) started in June with the first operating level and realised level 2 in December 2019. The concessions that are currently being operated are:

Franchise	Company	Start	End	Passengers per day (approx.)	Punctuality up to 5 min.	Trains
Ruhr-Sieg-Netz (RSN)	ABRN	2007	2019	22,000	93.3%	17
Ruhr-Sieg-Netz 2 (RSN II)	ABRN	2019	2034	17,000	-	18
Der Münstener (S7)	ABRN	2013	2028	13,000	95.1%	9
Niederrhein-Netz (NRN)	ABRN	2016	2028	19,000	91.4%	21
Rhein-Ruhr Express (RRX)	ABRN	2018-2020	2033	40,000	87.5%	29
S Bahn Rhein-Ruhr (SBRR)	ABRN	2019	2034	80,000	n/a	29
Emsland- und Mittelland-Netz (EMIL)	WfB	2015	2030	43,500	92.3%	28
Saale-Thüringen-Südhardt Netz (STS)	ABRM	2015	2030	21,757	95.4%	35
Dieselnetz Sachsen-Anhalt (DISA)	ABRM	2018	2032	18,727	92.3%	54
Stuttgarter Netz (STN)	ABRB	2019/2020	2032	25,000	72.1%	52
<b>Total (excl. RSN; expires in 2019)</b>				<b>255,984</b>		<b>275</b>

The concessions in the mobilisation phase are:

Franchise	Company	Start
Stuttgarter Netz (STN phase 3)	ABRB	June 2020
Rhein-Ruhr-Express (RE1)	ABRN	June 2020

## 2019 overview

In 2019 Abellio Germany achieved a revenue of € 534,2 million from its operations which will grow to approximately € 830 million in 2021 after all contracts have been fully mobilised. The EBIT of € -24,5 million (2018 € -1.4 million) was below target due to:

1. new tariff agreements with the unions resulting in the need for more employees, higher staff costs and additional recruitment and training costs,
2. high penalties for cancellations, punctuality and quality (€ 19.4 million) mainly due to an increased level of track works,
3. start-up problems at the start of new concessions negatively impacted the 2019 result.

During the year mobilisation costs for concessions started and to be started of € 9.5 million (2018 € 7.0 million) have been recognised and are included in the reported results.

Mobilisation costs are partly capitalised and partly expensed as incurred whilst revenues will not be generated until the actual start of the operation.

Currently Abellio Germany runs 292 train vehicles serving approximately 256,000 passengers a day and employs 2,754 people. According to 'Competition-Report 2019/2020' of Mofair Abellio Germany became the fourth largest train operating company among the competition railways in Germany, with a market share of 5.3 percent by annual train-kilometres of 52.8m at the end of 2019. In recent years, Abellio has built up a strong competitive position in the German rail market.

<b>Abellio Germany consolidated</b>	<b>2019</b>	<b>2018</b>
(in € million)		
Revenue	534.2	356.8
EBIT before IFRS 16 effect	-32.8	-1.4
IFRS 16 effect	8.3	-
EBIT	-24.5	-1.4
Intercompany financial result*	-5.3	-5.3
Other financial results	-13.2	-0.6
Profit before tax	-42.0	-7.3
Corporation tax	-10.3	-0.7
Net profit	-32.7	-6.6
Net profit before IFRS 16 impact	-28.8	-6.6
Capital investments	27.9	22.1
<b>Equity attributable to NS</b>	<b>61.2</b>	<b>53.5</b>
Other guarantees provided by NS	0	32.2
Capital at Risk, Abellio Germany	61.2	85.7

\* *Intercompany financial result consists of interest charges on loans and guarantee fees to shareholders*

In June 2019 Abellio in Baden-Württemberg started operating the first phase of the Stuttgarter Netz (STN) and the second phase in December 2019. The third phase will start in June 2020. Abellio in North Rhine-Westphalia started operating the first phase of the Rhein-Ruhr-Express (RRX) in December 2018. The second phase will start in June 2020. In Mitteldeutschland, the STS concession went in December 2018 into its fourth year of operations. Despite many infrastructure works of DB Netz, the performance of Abellio Rail Mitteldeutschland was good on the STS-network with an average punctuality of 95.4 % and punctuality in DISA has improved during the year after a difficult start in December 2018 resulting in an average punctuality of 92.3 %.

In the quality reports of the Regional Transport Association of Westphalia-Lippe (NWL), Abellio has continuously been on the podium as a gold and silver medal winner in recent years. The Rhine Ruhr Public Transport Authority (VRR) also consistently gives Abellio top marks in its customer satisfaction ranking. The company can score points in punctuality, seating and train attendants. In addition, the passengers in Abellio trains feel particularly safe. Accordingly, the company occupies the first six places in the ranking out of 49 contracts. Overall customer satisfaction with the company increased, making Abellio the most popular railway company according to VRR for passengers in Nord Rhine- Westphalia for the first time since 2013.

Abellio employees have also won several national and regional awards in the renowned "Eisenbahner mit Herz" (Big-hearted Rail Employees) competition organised by the Allianz pro Schiene (Pro-Rail Alliance). This year one of our conductors from Abellio Rail Mitteldeutschland became State Winner Thuringia.

## Organisation and staff

Abellio Germany's head office is based in Berlin with subsidiary offices in Halle, Bielefeld, Hagen and Stuttgart. Abellio has collective tariff agreements with the unions Gewerkschaft Deutscher Lokomotivführer (GDL) and Eisenbahn Verkehrs Gewerkschaft (EVG). With the mobilisation of several new networks and the results of the tariff agreements with the unions Abellio had to make great efforts in an empty labour market in Germany in order to hire enough personnel to comply with the contracts. The integration of so many new colleagues is a demanding task for the organisation.

## New trains

Abellio Germany has ordered new rolling stock via an operational lease arrangement: 52 Bombardier Talent 2 trains will be produced for Stuttgarter Netz. The trains for Abellio, owned by the PTA Nahverkehrsgesellschaft Baden-Württemberg (NVBW), will consist of 26 electric multiple units with 3 vehicles and 26 electric multiple units with 5 vehicles. Unfortunately, the manufacturer Bombardier was not able to deliver the ordered trains on the agreed dates. Replacement concepts with older and several train types had to be introduced at the start of the concession resulting in a high level of complexity in operations and low punctuality.

In order to be able to fully implement the timetable and the capacity requirements as ordered by the PTA, Abellio has developed a precautionary concept. The missing 18 trains will be replaced with vehicles of different types borrowed from Agilis GmbH, WestfalenBahn GmbH and DB Regio AG. Abellio also commissioned DB Regio AG to operate the line Stuttgart to Heilbronn for a few months. Train drivers had to prepare and be trained for a wide variety of train types which was time consuming. The full homologation of the new trains by the Federal Railway Authority is delayed until mid-2020.

On behalf of the Verkehrsverbund Rhein-Ruhr (VRR) Stadler supplied 41 flirt vehicles of the new fleet for the S-Bahn Rhein-Ruhr operated by Abellio.

For the Abellio Ruhr-Sieg-Network II, the previous vehicles were refurbished. 17 two or three-part "FLIRT" electric multiple units (Stadler) and a diesel multiple unit "Coradia LINT" (Alstom) are in operation. Special highlight in this network is a feel-good train. This train has a colorful family compartment and a special interior design with many graphic details. A striking exterior design as well as a new light ambience and a new seating in 1st and 2nd class provide further comfort on the journey.

## Outlook for 2020

In June 2020 Abellio will start the third phase of operations in Stuttgarter Netz (STN) and the second phase of operations in Rhein-Ruhr-Express (RRX) and will continue to work on cross border connections like Arnhem-Düsseldorf. Our focus will be on reaching a satisfactory agreement with our clients (PTAs) on compensation for the additional staff costs as a result of the tight labour market and the new collective tariff agreements as well as a fair penalty regime for infrastructure related underperformance following disruptions that are not influenceably by the train operating company. Such agreements are a condition for the profitability over the life of the contracts. Without such agreements it will be difficult to realise a reasonable profitable result in the German rail market. Based on the current conversations with PTAs we expect to achieve a satisfactory outcome. As a result from the new collective labour agreements and the mobilisation of contracts in 2020 an increase in personnel is expected compared to 2019.



## Operating companies

Abellio operates 9 rail concessions in 4 regions in Germany through the following operating companies:

- Abellio Rail NRW GmbH (ABRN),
- Abellio Rail Mitteldeutschland GmbH (ABRM),
- Abellio Rail Baden-Württemberg GmbH (ABRB),
- WestfalenBahn GmbH (WfB)

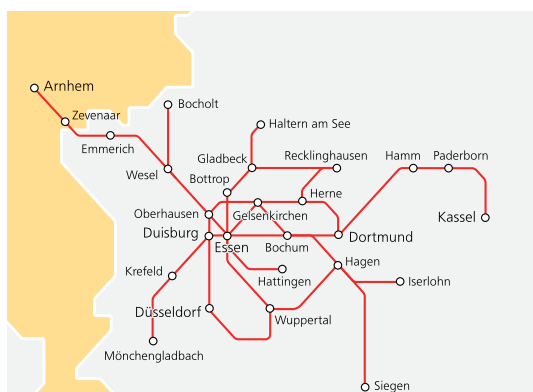
In addition, Abellio in Germany owns a cleaning services company called PTS, located in Essen.

<b>Abellio Germany</b>	<b>Revenue</b>	<b>Number of employees</b>
	(in € million)	(end of December 2019)
Abellio Rail Nordrhein Westfalen	157.2	802
Abellio Rail Mitteldeutschland	236.4	960
Abellio Rail Baden-Württemberg	28	312
WestfalenBahn	102.1	287
PTS	9.9	349
Other	0.6	44
<b>Total</b>	<b>534.2</b>	<b>2,754</b>

## Abellio Rail NRW GmbH

Abellio Rail NRW GmbH (ABRN), headquartered in Hagen, is one of the largest private rail traffic companies in North Rhine-Westphalia.

Abellio Rail NRW currently provides a service volume of around 18 million train kilometres, carrying 30 million passengers a year in doing so. With the Ruhr-Sieg network, the Rhine-Ruhr S-Bahn and the Rhine-Ruhr-Express, Abellio Rail NRW sets the pace for millions of commuters on the Rhine and Ruhr. Abellio is also active on the cross-border Lower Rhine network between Arnhem and Düsseldorf and connects the Dutch province of Gelderland with the most populous German state. Around 600 colleagues work for the North Rhine-Westphalian company, which has received several awards for its service quality. ABRN starts the second phase of the Rhine-Ruhr-Express with the operation of line RE 1 in June 2020, which connects the cities in North Rhine- Westphalia from Dortmund to Aachen.



## Abellio Rail Mitteldeutschland GmbH

Abellio expanded its presence in central Germany. Since 2015 Abellio trains are running in the Saale- Thüringen-Südharz (STS) electric network and since December 2018 also in the DISA network. Thousands of passengers are now able to travel with Abellio in Harz and Börde, as well as between the major cities of Erfurt and Magdeburg.

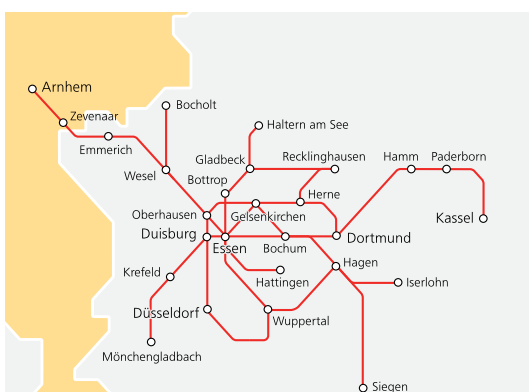
At the start of the DISA network, staffing problems occurred caused by a strong wave of illness in the winter months and recruitment and staff training. Difficulties in operational planning on the Unstrutbahn (part of DISA) led to the complete changeover of traffic to rail replacement traffic by bus over two months. In the second half of the year these problems have been fully resolved.

The large-scale construction works at the two major hubs in Halle and Köthen in Mitteldeutschland led to great difficulties in planning, the associated punctuality and the resulting penalties.



## WestfalenBahn GmbH

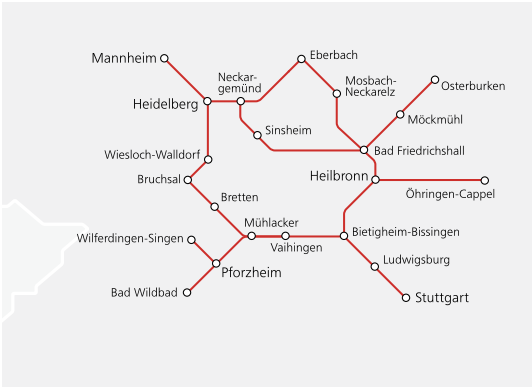
The company is located in Bielefeld and connects via Expresslines Emsland the cities Braunschweig and Hannover in Lower Saxony with Bielefeld and Rheine in North Rhine-Westphalia. From Münster there is a direct line via Meppen and Leer to Emden at the North Sea. The WestfalenBahn expanded the range of trains between Hanover and Braunschweig. There is also a half-hourly service on Sundays between the two largest cities in Lower Saxony. This corresponds to almost 1,000 more trips per year.



# Abellio Rail Baden-Württemberg GmbH

The company is located in Stuttgart. On June 9th 2019, the first phase and on December 8th 2019, the second phase of operations in STN were set into operation. As already described, the manufacturer Bombardier was only able to deliver a very small number of the 52 ordered trains to Baden-Württemberg, so that several replacement concepts had to be put in place and implemented using third-party vehicles. Passengers and stakeholders were patient with Abellio for a few months after the start of the franchise. However, since Bombardier was still unable to deliver, passenger complaints increased and the PTA, politics and the media reported on a bumpy start of the network.

Additionally, a three-track workshop with a total length of 120 meters and train storage sidings for Stuttgarter Netz is built in Pforzheim. This city in Baden-Württemberg near Stuttgart has a long standing train tradition and is ideally located within the route network. At the end of 2019 the new employees were able to start their work in the new workshop.



Looking ahead

# Expected developments in the long term



Over the course of the next few decades, the Netherlands will be facing major economic, social, mobility and sustainability challenges. The world around us is changing fast.

Urbanisation will increase, not just in the Randstad conurbation but also in other urban areas such as Eindhoven, Arnhem-Nijmegen and Groningen. Healthy, pleasant living environments will come under increasing pressure. In the years ahead the housing shortage will persist, as a result of which more than 75,000 new houses will have to be built, on average, to alleviate the shortage. Over 2018-2030, the total population is projected to increase by around 849,000 to 18 million people. Combined with slow construction, this growing demand will cause the housing shortage to intensify, especially in regions already in the top 10 of traffic congestion where accessibility and liveability are under pressure. Amsterdam is predicted to grow to one million residents by 2030 and 1.1 million by 2040, and Utrecht's population will increase from 339,000 today to more than 400,000 in 2030 and 455,000 by 2040.

The huge housing construction challenge in the Netherlands should be tackled with due regard for the need to ensure high-quality public transport connections. The most recent figures from mobility research, from 2018, show that the total number of passenger-kilometres in the Netherlands in that year across all forms of mobility amounted to over 189 billion. That figure will rise to 210 billion by 2030 and to 229 billion by 2040 - and perhaps even to 246 billion if we take the highest-growth scenario into account. Our aim is to facilitate that degree of mobility, as it will stimulate the economy, increase prosperity and strengthen connections between people. The effect is intensified by the growth of hubs such as Amsterdam Airport Schiphol, the Port of Rotterdam and the IT hubs concentrated in Amsterdam, Eindhoven and Groningen. The Randstad conurbation is in danger of becoming clogged up due to the growing, concentrated demand for mobility, and problems are developing at various points in the mobility system in the form of increased congestion and delays in the road network, problems with emissions and space being taken up in densely populated areas, and crowded trains. Quieter areas have their own challenges as they face pressure on the supply of public mobility solutions. Nevertheless, it is important for communities that proper access should be maintained also, and in particular, to these parts of the Netherlands. That requires innovative, smart and tailored solutions.

## Modes of transport

We are seeing rapid developments in the technological domain. Electric travel is gaining ground, at the expense of fossil fuel-based travel. Technical innovations are improving the safety and efficiency of travelling, and we try to benefit from these changes as much as possible. Technological developments in the fields of digitisation, automation and robotisation – such as affordable Internet, big data and artificial intelligence - are also leaving their marks on the mobility landscape. In addition, passengers increasingly expect personalised door-to-door journeys, and new players entering the market offer new concepts such as shared cars and scooters. New forms of transport on the roads and railways (electric vehicles, self-driving cars, demand-driven transport) will need to become seamless parts of the mobility system as a whole. What is more, younger generations in particular have a different attitude to mobility, with a shift from ownership to usage. In future, all forms of mobility will be interconnected both physically and digitally to enable people to make optimum choices in their door-to-door journeys. This concept is known as Mobility-as-a-Service (MaaS). NS remains keen to help meet the challenge of creating good connections that match the demands of passengers, companies and institutions.

## Transition to sustainable mobility

Solutions to promote mobility improvements will become more and more sustainable going forward. This is primarily due to the increasing use of sustainable sources of energy rather than fossil fuels. We are also seeing growing awareness and a growing sense of urgency as regards the climate crisis. A transition to alternative, more sustainable forms of transport is essential if greenhouse gas emissions are to be reduced and the living environment made pleasanter and healthier. Society's requirements regarding cross-border travel are changing,

with sustainable travel by train being preferred to air travel. NS provides sustainable mobility to 10.7 million passengers in the Netherlands every year, thereby assisting the economic development and accessibility of cities and regions, as well as helping the Netherlands achieve its climate objectives. Since January 2017, our trains have been running entirely on wind power; indeed, we are the first country in the world where all the electric trains run on new wind power.

## Implementation of the Long-Term Rail Agenda

In response to increasing mobility, NS is working on the agreements in the Long-Term Rail Agenda heading towards 2028, together with the Ministry of Infrastructure and Water Management as the commissioning authority and with partners including ProRail. One aspect of this is the 'High-Frequency Rail Transport Programme' (Programma Hoogfrequent Spoor). Running Intercity trains six times an hour on the key routes will lead to a substantial increase in transport capacity. We have taken a significant step in this direction by increasing the frequency of the Amsterdam-Eindhoven Intercity trains as of the 2018 timetable. The increased frequency has led to growth in the number of passengers along this corridor, with increased reliability, greater seat availability and higher customer satisfaction scores. NS will be focusing on further implementing the Long-Term Rail Agenda in the next few years. NS and ProRail have conducted a joint study to map the next corridors that would benefit from an increase in the number of Intercity trains per hour. This identified the Arnhem-Schiphol Airport-Rotterdam corridor as one of the corridors with a high level of urgency. Preparations have now started for an increase in the frequency of trains on this route as of the timetable for 2022.

## Preparing for further growth with a vision on mobility

Even after the implementation of the Long-Term Rail Agenda, the Netherlands will still face sizeable economic, social and sustainability challenges. NS is collaborating with a number of other parties on a shared long-term vision for mobility in the Netherlands. We are doing this in part in the vision for the future for public transport, which is coordinated by the Ministry of Infrastructure and Water Management and involves all players in the public transport sector: national and local authorities, ProRail and carriers including NS. NS is one of the initiators of the Mobility Alliance, which combines organisations from the bicycle, automobile, freight, ferry, bus, tram, metro and rail transport sectors. The Mobility Alliance focuses on an ambitious plan with a vision for mobility for the period up to 2030, and has launched pilot projects on paying for usage.

The connecting theme in these visions for mobility is that the Netherlands needs an integrated approach to mobility with a strong public transport system. Key elements in this are a faster and more convenient door-to-door journey and better international connections from the Netherlands. NS is working hard on this with its partners (other carriers, market players and national, regional and urban authorities). We are doing this for example by optimising connections between various modes of transport and improving transport for 'the first and last mile', for instance with an enhanced travel planner, journey information, high-quality bicycle parking facilities and public transport bicycles. This is how NS is both helping to keep the Netherlands accessible and make it more sustainable.

## Developments in the regulation of the Dutch railway market

Over the next few years, two developments will affect the set-up of the Dutch railway market and, consequently, the position and role of NS: choices made by the Dutch government about market regulation on the Dutch railways, and the government's decision to change the status of ProRail. NS is monitoring these developments closely. Regarding the conversion of ProRail into an autonomous administrative authority, the combined passenger and freight transport carriers (including NS, shipping companies, passenger association Rover

and the Confederation of Netherlands Industry and Employers) have all expressed major concerns about the potential consequences. Performance on the tracks has improved markedly in recent years, largely thanks to good collaboration between ProRail and the carriers. There is concern that ProRail will be preoccupied with its internal organisation going forward, which will put pressure on the results for both passengers and freight. Many aspects remain unclear. For example, we do not know what form the collaborative ties with carriers and entrepreneurs in the railway system will take. The position taken by NS is that all developments must be geared to meeting the mobility challenges mentioned above that the Netherlands will be facing in the next few decades. That means we will continue giving priority to 'passengers, passengers and passengers' in the years ahead.



NS Group

# Report of the Supervisory Board



NS can look back on a successful 2019. Our operational performance is up to standard, so we can look forward to the future with considerable confidence. 2020 looks set to become an important year, as we are awaiting the results of a number of marketing studies of significance for NS in the near future.

## Strategy

The NS 'On Track for Improvement' strategy (2016-2019) focused on improving the company's operational performance. One important component of the strategy was our performance on the main rail network. The Supervisory Board monitors that performance, and at every meeting we discuss the progress made in light of the midterm review, in the spring of 2020, when the government will assess NS's performance half-way into the franchise period for the main rail network. The Supervisory Board monitors our progress on the KPIs. In 2019, NS's performance was above the minimum required value on nearly all franchise KPIs and even above the agreed target value for most KPI's.

The company also did well on the other elements of its strategy. For example, NS is offering more and more door-to-door journey services, including public transport bicycles, rental cars, zone taxis and bicycle parking facilities, supported by agreements made in consultation with local providers of bus, tram and metro services. As such, the company is increasingly successful in realising this part of its strategy. NS also achieved good results on the World-Class Stations element of the strategy. One example is the modernisation project launched for some 200 smaller stations.

The operations and performance of Abellio are a regular item on the agenda for discussions with the Executive Board. External factors have caused the returns on franchises in Germany and Scotland to come under pressure. As a result, in March 2022 the ScotRail franchise will not be renewed. Abellio was only prepared to renew the contract if cost-effectiveness improved.

The Supervisory Board also monitors developments concerning the Williams Review by the UK Department for Transport into the current and future structure of the British rail industry and passenger transport.

## The future of NS and tightened strategy

In 2019, NS continued efforts to tighten its strategy for the 2020-2025 period, including a look ahead towards 2030. The Executive Board was closely involved in this exercise, for example through a temporary committee and regular consultation with groups of NS staff lead by Executive Board member Tjalling Smit. In addition, the Supervisory Board co-initiated the organisation of a series of seminars with scientists and other experts on the future of the railways. Several Supervisory Board members also attended these events, which have resulted in 'De toekomst op de rails' ('On Track for the Future'), a dossier published by economists' trade journal ESB.

NS has now tightened its strategy in preparation for the future. The major challenge is to accommodate the growth in passenger volumes in the face of a shortage of infrastructural capacity. This combination will result in stagnation in the mobility system. For example, platforms at the stations may well prove too short for the longer trains to be deployed. To continue transporting as many passengers as possible, NS will continue examining possible improvements to the timetable and the more effective deployment of staff. In addition, NS is purchasing more than three billion euros' worth of new trains. NS has also identified opportunities to improve mobility through innovation, for example by jointly promoting AI technology with Ahold Delhaize, ING, KLM and Philips.

Several market organisation studies currently being undertaken potentially also concern the activities of NS, including studies into the high-speed railway line, regional railway lines and the position of the stations. The political debate on this is scheduled for the spring of 2020. The Supervisory Board is also devoting ample attention to this, and is being updated by the Executive Board on a continuous basis about developments in these areas. Given NS's

current performance level, the Supervisory Board has every reason to feel confident about the upcoming midterm review. The Supervisory Board is keen to identify any changes in the KPIs for the second half of the franchise. NS has posted fine results during a period characterised by a sharp rise in passenger numbers, but given the projected further growth in passenger volumes it is not realistic to expect that all target values will continue to rise.

### **Individual Compensation for Victims of WWII Transport**

NS has taken over the recommendation issued by the Committee on Individual Compensation for Victims of WWII Transport by NS. The Supervisory Board was meticulously informed by the Executive Board of developments during the decision-making process, and supports the decision wholeheartedly.

### **Safety**

Safety is a regular item on the Supervisory Board's agenda, and is the theme of visits by the Supervisory Board of NS business units or drills every year. For example, in 2019 the Board attended a safety walk at the Watergraafsmeer maintenance company in Amsterdam. The Supervisory Board itself also did a terrorism emergency drill and performed a deep dive on railway safety.

### **Risk management**

Over the past few years, NS has further professionalised its approach to risk management. Together with the Supervisory Board, the Risk department conducts a 'black swan' exercise every two years. In 2019, the focus of that exercise was on NS's tightened strategy. The outcomes of the black swan exercise and the mitigating measures proposed will be taken into account in further decision-making.

## **Corporate governance**

### **Functioning of the Supervisory Board**

Every three years, the Supervisory Board engages an external agency to evaluate its own performance. The next evaluation is to be held in 2020. The Board also conducted its own internal evaluation last year, and found that its members collaborate effectively with one another and bring complementary knowledge and skills to the Board. The relationship between the Supervisory Board and the Executive Board is good. The Supervisory Board is involved in complex and far-reaching decisions in a timely and effective manner that also, and explicitly, covers the associated dilemmas.

### **The functioning of the Executive Board and collaboration with the Supervisory Board**

The Executive Board functioned satisfactorily and performs its tasks well. The Supervisory Board has confidence in the Executive Board and professional relations between the two boards are good. Both the Supervisory Board and the Executive Board keep to their roles in the performance of their tasks. While the Supervisory Board is careful not to do the Executive Board's job, it does challenge the Executive Board's members and monitor and supervise decision-making.

## Changes in the Executive and Supervisory Boards

### Executive Board

Susi Zijderfeld left NS with effect from 1 May 2019. The Supervisory Board would like to thank Ms Zijderfeld for her huge commitment to further professionalising risk management within NS and for promoting a change of culture that has demonstrably helped to improve openness and accountability. Furthermore, the socio-economic role of our stations has grown under her leadership. As a result of Ms Zijderfeld's departure, the Executive Board did not have its full complement of five members throughout the year. On 15 October 2019, Ms Zijderfeld was succeeded by Anneke de Vries, who is responsible for Stations and Risk. Ms De Vries has a wealth of experience in the fields of real estate, retail and primary risk management.

### Supervisory Board

In 2019, Paul Rosenmöller left the NS Supervisory Board after the end of his third term of office. NS owes him a considerable debt of gratitude. Mr Rosenmüller was appointed to the Supervisory Board of NS under enhanced powers of recommendation on 1 June 2007. He was always keen to take the interests of his NS colleagues explicitly into account. His constructive yet critical perspective and huge affinity with public transport have proved of immense value to NS over the past 12 years.

In early 2020, Jeroen Kremers stepped back after the end of his second term of office. We greatly appreciated his extremely valuable contributions; NS owes him a considerable debt of gratitude. He was especially keen on identifying the company's long-term interests right from the start of his first term, in 2012. From his supervisory role, he exerted considerable influence on the moves to further strengthen the risk and compliance function. In so doing, he contributed to the solid basis on which NS rests today.

As of 1 June, the shareholder appointed Nebahat Albayrak (b. 1968) member of the Supervisory Board of NS. Her appointment covers a period of four years and may be subsequently be extended. Ms Albayrak was nominated to the shareholder by the Supervisory Board under enhanced powers of recommendation of the Central Works Council. Her knowledge and experience encompass both the private and the public sectors. In addition, she has a demonstrable affinity with sustainable mobility and has extensive management experience.

The shareholder also appointed Herman Dijkhuizen member of the Supervisory Board of NS, effective 1 January 2020. His appointment covers a period of four years and may be subsequently be extended. Mr Dijkhuizen fills the vacancy that had arisen when Mr Kremers left the board. He is a financial expert and has considerable management experience both in the financial market and in the public and private sectors.

## Meetings of the Supervisory Board and its committees

The Supervisory Board met eleven times in 2019, of which three meetings specifically concerned the NS strategy. With the exception of three members who were absent on one occasion, all Supervisory Board members attended all the meetings. The average attendance of these meetings was 96%. Two away-days were organised with just the Supervisory Board members. The Supervisory Board has two permanent committees: the Risk and Audit Committee, and the combined Remunerations and Appointments Committee. With three members being absent at one meeting, attendance of the meetings of these committees was 96% and 100%, respectively.

### **Risk and Audit Committee**

The Risk and Audit Committee includes all Supervisory Board members. In 2019, this committee was chaired by Jeroen Kremers, the Supervisory Board's financial expert. He was succeeded in that role by Herman Dijkhuizen on 26 January 2020.

The committee met four times. The Chair and CEO, the Members of the Executive Board for Finance & Abellio and Stations & Risk, the Audit Director and the external auditor were also invited to these meetings. Depending on the agenda, other individuals such as the directors of Legal, Group Control & Expertise and Risk were also invited. The main topics were the financial statements, the annual report, the six-monthly figures, the budget, the group plan for 2020-2024, the results of Abellio, risk management (including the outcomes of the stress tests) and risk appetite (see also the section in this report on Safety), audit plans and reports, reporting and management letters from the external auditor, progress in IT projects and risk control, the company's tax position and Chromium 6. In addition, the Risk and Audit Committee discussed the quarterly statements issued by the Integrity & Compliance department.

Major items in the auditor's management letter include the progress and enhanced reliability of the performance indicators for the main rail network, the risk-sharing mechanism for franchises, and cybersecurity control measures. The auditor also points to the management and risk profile of the Abellio franchises and potential risks associated with Brexit, findings from the IT environment with a special focus on improvements and points for attention in the area of user rights, the change management process and the monitoring of functional segregation conflicts and accounts with extensive rights.

### **Remunerations and Appointments Committee (combined)**

Since the departure of Paul Rosenmüller, the combined Remunerations and Appointments Committee has been chaired by Janet Stuijt; its members are Gerard van de Aast, Nebahat Albayrak, Pim van der Feltz and Marike van Lier Lels (since January 2020). The committee met three times in 2019. The topics discussed included filling the profiles for successors to members of the Executive Board, talent development, a new and more extensive process for evaluating the Executive Board, the remuneration policy and the functioning of the Executive Board, including both its performance as a team and the performance of its individual members.

All members of the Supervisory Board are independent as defined in the Dutch Corporate Governance Code. The Supervisory Board broadly subscribes to the best practice stipulations 2.1.7 through to 2.1.9 in the 2016 Code.

### **Shareholder**

The Supervisory Board maintained a good relationship with the shareholder in 2019, with regular contacts in a professional setting.

### **Employee participation**

The Supervisory Board maintained regular contacts with the Central Works Council. This applies in particular to the two Supervisory Board members whose appointment was effected under enhanced powers of recommendation, and to the chair. The relationship is good.

### **Relationship with the external auditor**

As standard, the external auditor attends all meetings of the Risk and Audit Committee. The external auditor also attends the meetings of the entire Supervisory Board when the financial statements and six-monthly figures are discussed. In addition, the Risk and Audit Committee consults with the external auditor without the Executive Board being present. The functioning of the external auditor is evaluated meticulously.

## Financial results

NS achieved a net profit attributable to the shareholder of €208 million this year, compared with a profit of €106 million in 2018. The underlying profit (disregarding one-off items) rose from €205 million in 2018 to €275 million in 2019. A proposal has been made to pay a dividend of €73 million, which equals 35% of the result for 2019. The Supervisory Board critically assessed the results and discussed them with the external auditor. NS has an ambitious investment programme of nearly €4 billion in the Netherlands over the coming years. These are long-term investments, largely in new rolling stock, that NS will finance partly with loan capital. These investments will further improve quality for passengers.

## About this report

The financial statements for 2019, as prepared by the Executive Board, were discussed by the Supervisory Board. The external auditor (EY) was present during the discussion. The financial statements are accompanied by the Executive Board's report. We invite the General Meeting to adopt the 2019 financial statements. We also invite our shareholder to discharge the Executive Board and the Supervisory Board from their liabilities. The profit appropriation proposed by the Supervisory Board can be found in explanatory note 24 to the financial statements.

Thanks to the efforts and the contributions made by all NS staff in the Netherlands and abroad, in 2019 NS was able to concentrate once again on delivering the best possible performance for its passengers. NS ended the year on a positive note by achieving all the franchise KPI targets.

The Supervisory Board would like to thank all employees for their excellent performance in 2019, which was reflected in very high customer satisfaction scores and will serve as the basis for the company's success going forward.

Needless to add, we hope we can also count on their undiminished commitment for our passengers in 2020.

Utrecht, 26 February 2020

The Supervisory Board

## Who's who on the Supervisory Board

### Gerard van de Aast, chair (b. 1957), Dutch nationality (m)

- Appointed on 4 March 2014 until 2018, reappointed until 2022
- Background: former chair of the executive board of Royal Imtech NV  
Former chair of the executive board of Koninklijke Volker Wessels NV,  
former member of the executive board of Reed Elsevier
- Other positions held: member of the supervisory board of Signify,  
member of the supervisory board of Witteveen+Bos



**Nebahat Albayrak (b. 1968), Dutch nationality (f)**

- Appointed on 1 June 2019 until 2023
- Background: Appointed on 1 June 2019 until 2023 vice-president External Relations, Global Integrated Gas and New Energies at Shell.  
Former State Secretary for Justice and MP
- Other positions held: member of the supervisory board of Unilever Nederland, member of the executive board of Fonds21



**Pim van der Feltz (b. 1964), Dutch nationality (m)**

- Appointed on 1 May 2017 until 2021
- Background: CEO of Google Netherlands
- Other positions held: supervisory board of Kröller-Müller Museum, member of the advisory board of NWO



**Jeroen Kremers (b. 1958), Dutch nationality (m)**

- Appointed on 26 January 2012 and reappointed in 2016, stepped down as of 26 January 2020
- Background: former Vice-Chair & Chief Risk Officer, Managing Board, Royal Bank of Scotland NV and Head Global Country Risk, RBS Group
- Other positions held: member of senior advisory board Oliver Wyman Consultancy, member of the supervisory board of Robeco, member of the supervisory board of NIBC, adviser for Common Wealth Bank of Australia



**Marika van Lier Lels (b. 1959), Dutch nationality (f)**

- Appointed on 3 February 2016 until 2020
- Background: COO of Schiphol Group until 2005, after that various supervisory board memberships
- Other positions: member of the supervisory board of PostNL, member of the supervisory board of Dura Vermeer, non-executive board member at RELX Plc, chair of Innovation Quarter





#### **Janet Stuijt (n. 1969), Dutch nationality (f)**

- Appointed on 15 August 2016 until 2020
- Background: General Counsel & Head of Compliance, Corporate Secretary, NN Group NV, member of the management board, NN Group NV



#### **Appointed on 1 January 2020**

##### **Herman Dijkhuizen (b. 1960), Dutch nationality (m)**

- Appointed on 1 January 2020 until 2024
- Background: CFO and vice-chair of the executive board of NIBC Holding N.V
- Other positions held: vice-chair of the supervisory board of Stichting VU, CFO and vice-chair of the executive board of NIBC Holding NV



#### **Stepped down in 2019**

##### **Paul Rosenmöller (b. 1956), Dutch nationality (m)**

- Appointed on 1 June 2007 and reappointed in 2015 until 1 July 2019
- Background: chair of the Secondary Education Council
- Other positions held: chair of the supervisory board of AFM



The remunerations of Supervisory Board members can be found here <[link to financial statements](#)>

## Remuneration of Executive Board members

The key objective of the NS remuneration policy is that it should enable the Supervisory Board to attract and retain well-qualified members for the Executive Board. The remuneration policy is aimed at supporting and furthering NS's objectives and strategy. At the same time, the remuneration policy reflects NS's public status.

## Objectives and principles

- Given that the Dutch State is the sole shareholder, the remuneration policy is based on the principles for the remuneration policies of State participations.
- The determination of job grades is an important element in setting levels of remuneration.
- To determine remuneration levels for the Executive Board, a market comparison is used based on two reference markets: the public and semi-public sector (AMC, the Tax and Customs Administration, GVB, Havenbedrijf Rotterdam, the Ministry of Infrastructure and Water Management, ProRail and Vitens) and the Dutch private sector, using weights of 60% and 40% respectively.
- NS pays Executive Board members based on the market median salaries in the above reference markets.
- When determining the remuneration of the Executive Board members, the remuneration policy's impact on long-term value creation was taken into account. For NS, this means that the remuneration is determined with due regard for NS's position in society, its obligations by virtue of the franchise and the long-term challenges for mobility in the Netherlands.
- The NS remuneration policy satisfies the best-practice stipulations on remuneration set out in the Corporate Governance Code.

<sup>1</sup> The reference group in the Dutch private sector includes over 600 Dutch businesses in a variety of industries.

## Performance agreements for Executive Board members

All members of the Executive Board have entered into performance agreements laid down in target letters. The performance agreements comprise both joint and individual targets. The individual targets are related to the portfolio for which the Executive Board member concerned is responsible. The results do not give entitlement to any reward (see Variable remuneration). The joint targets for 2019 were as follows:

Objectives	KPI	Target
Customer	Customer satisfaction	82%
	Passenger punctuality on main rail network	91.7%
	Seat availability at peak times (main rail network)	95.5%
Financial	EBIT NS	€210 million
Conduct and culture	NS is working on an open and safe working environment, in which we hold each other accountable, are honest with each other, make conscious choices, weigh up risks and help each other.	
	<b>Integrity</b>	
	The score on the maturity level of our integrity culture based on professional judgement in Q4 2019 rose compared with the score in Q4 2018.	+0.2
	<b>Safety</b>	
Risk assessments and evaluations include a corresponding action plan carried out in accordance with the occupational health and safety policy.	75%	
<b>Sustainability</b>		
More energy efficiency for our buildings and trains, per year per passenger-kilometre.	At least 2%	

A KPI for seat availability during peak hours on the main rail network of 94.9% - this target was not met. All other targets mentioned above were met in 2019.

Although the various issues are covered by different members of the Executive Board, the board bears collective responsibility for achieving the joint targets mentioned above. As per their respective portfolios, the Executive Board members are also responsible for individual targets. For instance, Ms Rintel is responsible for operational targets, Mr Groenewegen for Abellio's financial targets (among others), Ms De Vries for the performance of the stations and Mr Smit for KPIs on passengers' individual travel experience.

## Remuneration components

- Base salary
- Variable remuneration
- Pension
- Benefits

The financial statements contain a table in note 2 showing all the remuneration components.

As regards Ms De Vries (Member of the Board - Stations and Risk), all remuneration components are calculated with due regard for the fact that she joined the Executive Board on 15 October 2019. Ms Zijderveld, Chief Governance, Risk & Compliance Officer, stepped down on 1 May 2019.

## Base salary

In 2019, the gross annual base salary including holiday allowance for the members of the Executive Board was as follows:

	Position	Base annual salary as at 31 December 2019 (€)	Base salary received (€) in 2019
Mr R.H.L.M. van Boxtel	Chair and CEO	473,806	469,593
Mr H.L.L. Groenewegen	Finance Director	371,613	368,308
Ms M.E.F. Rintel	Director of Operations	371,613	368,308
Ms S.M. Zijderveld	Chief Governance, Risk & Compliance Officer	-	122,402
Mr T.B. Smit	Commerce & Development Director	371,613	368,308
Ms A.M.E. de Vries	Stations and Risk Management Director	371,613	78,918

The Remunerations Committee uses the Hay method to assess the job grades of the members and the chair of Executive Board. A specific level of remuneration can then be attached to each job grade identified. Likewise, for other NS employees not covered by the collective labour agreement, the committee first determines the job grade based on the Hay method and then links a remuneration level to that grade. This method ensures that the levels of remuneration for Executive Board members are determined with due consideration of the internal pay ratios.

The difference between the annual base salary and the base salary received is due to the fact that the salaries were increased by 1.2% as of 1 October 2019 pursuant to the collective labour agreement. This is in line with the remuneration policy. All NS employees covered by the collective labour agreement received this pay rise. The overall income of the employee with the highest base salary, namely the Chair and CEO, is 9<sup>1</sup> times the median value of the salaries of all NS staff in the Netherlands. The internal pay ratios did not significantly change relative to 2018.

<sup>1</sup> *Basic assumptions: All employees at NS and Abellio Nederland who were employed throughout the year are included in the calculation. The calculation is based on the following components: the base salary, variable remuneration and pension costs. The above components apply to both the employees and the Chair & CEO. Both full-time and part-time employees are included in the calculation.*

## Variable remuneration

In their employment contracts, all members of the Executive Board explicitly waived entitlement to variable remuneration. The Supervisory Board may consider reintroducing variable remuneration, which is capped at 20% of the relevant member's annual base salary, as described in the remuneration policy for the Executive Board.

## Pension

All members of the Executive Board are also members of the NS pension plan. The employer's share of the pension costs for the entire Executive Board was €68,228 in 2019 (2018: €73,385). The employer pays two thirds of the total pension costs.

	Position	Pension costs (€)
Mr R.H.L.M. van Boxtel	Chair and CEO	15,009
Mr H.L.L. Groenewegen	Finance Director	15,009
Ms M.E.F. Rintel	Director of Operations	15,009
Ms S.M. Zijderveld	Chief Governance, Risk & Compliance Officer	5,003
Mr T.B. Smit	Commerce & Development Director	15,009
Ms A.M.E. de Vries	Stations and Risk Management Director	3,187

As required by legislation, pension accrual is capped at a salary of €107,593. NS and the trade unions have agreed to pay out a gross contribution in addition to the salary as an alternative for the cap on pension accrual. NS is allocating a gross contribution of 12% of the part of the salary in excess of €107,593 to all current and new staff. A transitional scheme applies for members who were 46 or older on 1 January 2015. They receive a supplementary age-related contribution. The percentage in question is determined once only. In 2019, members of the Executive Board received a contribution on the same basis as in the above scheme for NS employees.

<sup>1</sup> *Basic assumptions: All employees at NS and Abellio Nederland who were employed throughout the year are included in the calculation. The calculation is based on the following components: the base salary, variable remuneration and pension costs. The above components apply to both the employees and the Chair & CEO. Both full-time and part-time employees are included in the calculation.*

	<b>Position</b>	<b>Alternative for capping the pension accrual (€)</b>
Mr R.H.L.M. van Bortel	Chair and CEO	43,440
Mr H.L.L. Groenewegen	Finance Director	31,286
Ms M.E.F. Rintel	Director of Operations	33,893
Ms S.M. Zijderveld	Chief Governance, Risk & Compliance Officer	10,385
Mr T.B. Smit	Commerce & Development Director	31,286
Ms A.M.E. de Vries	Stations and Risk Management Director	6,728

\*) Ms Rintel receives a higher remuneration as she came under the transition scheme as per 1 January 2015 before joining the Executive Board.

## Benefits

The benefits that apply to all other NS employees, including healthcare insurance schemes and transport facilities, also apply to the Executive Board members.

The benefits package for the Executive Board additionally includes an appropriate expense allowance, a lease car and the use of communication devices. The lease scheme includes the option of waiving the right to a lease car and being paid the gross mobility budget instead. Additionally, Executive Board members qualify for a directors' chauffeur-driven car to ensure they can carry out their individual tasks as effectively as possible. In principle, the directors' car should only be used for business trips. NS takes this to include business trips not directly associated with the relevant member's appointment, but where private use is unavoidable given the combination with the obligations associated with the relevant member's position at NS. To account for the use of the directors' car that is not directly linked to the job, an addition to the taxable income is applied. As the addition to the taxable income is caused by private use that is unavoidable given the combination with the obligations associated with the relevant Executive Board member's position at NS, the Executive Board members receive an allowance for the tax owed on the addition to the taxable income. This allowance is designated as part of the work-related costs scheme and is therefore paid to the Executive Board members as a net amount. The company has not extended any loans, advances or guarantees to members of the Executive Board.

	<b>Position</b>	<b>Payment of lease amounts (€)</b>	<b>Allowance for additional tax liability for director's car</b>	<b>Expense allowance</b>
Mr R.H.L.M. van Bortel	Chair and CEO	-	9,588	4,368
Mr H.L.L. Groenewegen	Finance Director	16,920	2,400	4,368
Ms M.E.F. Rintel	Director of Operations	2,784	2,400	4,368
Ms S.M. Zijderveld	Chief Governance, Risk & Compliance Officer	5,640	800	1,456
Mr T.B. Smit	Commerce & Development Director	-	2,400	4,368
Ms A.M.E. de Vries	Stations and Risk Management Director	3,967	510	928

\* Mr van Boxtel used the directors' chauffeur-driven car in 2019 and this was compensated by waiving the gross payment of the mobility budget. Mr Groenewegen and Ms Zijdeveld both opted for the payment of the mobility budget. Ms Rintel, Mr Smit and Ms De Vries had lease cars in 2019. Both Ms Rintel and Ms De Vries did not use the entire mobility budget and therefore received payment of a portion of that budget. Mr Smit did use the entire mobility budget and therefore did not receive any such payment.

## Employment contracts

Members of the Executive Board are appointed for a period of four years at the most. Reappointments can be made for subsequent four-year periods.

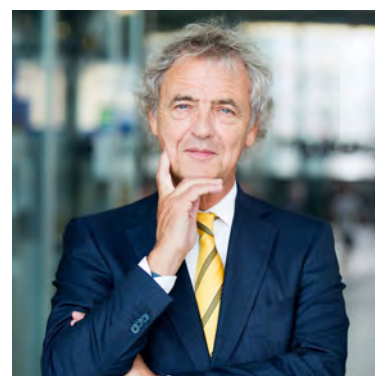
	Position	Appointment date	End of appointment
Mr R.H.L.M. van Boxtel	Chair and CEO	1 August 2015	31 July 2020
Mr H.L.L. Groenewegen	Finance Director	15 September 2016	14 September 2020
Ms M.E.F. Rintel	Director of Operations	15 July 2016	14 July 2020
Mr T.B. Smit	Commerce & Development Director	1 April 2017	31 March 2021
Ms A.M.E. de Vries	Stations and Risk Management Director	15 October 2019	14 October 2023

All employment contracts with members of the Executive Board include a period of notice for the employer of four months. On termination of the employment contract at the initiative of NS, the severance payment cannot exceed one year's base salary. No severance payment will be paid in the event of seriously culpable or negligent conduct on the part of the member concerned.

## Personal details – Executive Board

### Roger van Boxtel (b. 1954), Chair and CEO, Dutch nationality

- Focus on: corporate strategy and communication
- Other positions held: member of the supervisory board of APG Group, member of the managing committee of VNO-NCW, chair of the supervisory board of museum De Fundatie, chair of the supervisory board of Amsterdam Sinfonietta, member of the board of CER, chair of the Werk aan Uitvoering sounding board group of MR
- Background: Dutch Law (University of Amsterdam)
- Career includes: VNG, AEF, Member of Parliament in Lower House and Upper House (party chair), Minister for Urban Policy and Integration and IT, CEO of Menzis



**Bert Groenewegen (b. 1964), Member of the Board - Finance and Abellio, Dutch nationality**

- Focus on: finance, Abellio, IT, procurement, accommodation, new trains
- Other positions held: member of the supervisory board of Coolblue, member of the supervisory board of Teslin Participaties, member of the supervisory board of the Dutch Railway Museum
- Background: Business Economics (Tilburg University)
- Career includes: Exact Software, General Atlantic Partners, PCM Uitgevers, Ziggo



**Marjan Rintel (b. 1967), Member of the Board - Operations, Dutch nationality**

- Focus on: day-to-day service in the Netherlands and internationally (train services, adjustments, maintenance and cleaning), asset management of rolling stock and operating assets, and refurbishment
- Other positions held: member of the board of governors of Hermitage Amsterdam, member of the supervisory board of Nederlandse Loterij, member of the executive board of the National Committee for 4 and 5 May Foundation
- Background: Business Administration (Groningen University)
- Career includes: Amsterdam Airport Schiphol, KLM, Air France/KLM



**Tjalling Smit (b. 1977), Member of the Board - Commerce & Development, Dutch nationality**

- Focus on: corporate strategy, network development, marketing and sales activities, digital affairs
- Other positions held: member of the executive committee of Coöperatie OV Bedrijven
- Background: Business Administration (Nyenrode)
- Career includes: Transavia, Air France/KLM



**Anneke de Vries (b. 1964), Member of the Board - Stations and Risk, Dutch nationality (Executive Board member since 15 October 2019)**

- Focus on: stations and risk management
- Other positions held: patroness of NS Harmonie
- Background: Economic Geography and post-doc degree in Real Estate Studies (University of Amsterdam)
- Career includes: Albert Heijn, ING Vastgoed Ontwikkeling, Bureau Architectenregister and Rochdale Housing Corporation



## Stepped down in 2019

**Susi Zijderveld (b. 1969), Chief Governance, Risk & Compliance Officer, Dutch and Canadian nationalities (until 1 May 2019)**

- Other positions held: member of the supervisory board of NIBC, chair of RemCo NIBC, member of the board of the National Committee for 4 and 5 May Foundation, member of the board of Concertgebouwfonds, member of the advisory board of The Millennials
- Background: Master of Laws (VU Amsterdam)
- Career includes: Stibbe, De Nederlandsche Bank, Central Office for Motor Vehicle Driver Testing (CBR)





# Corporate governance



NV Nederlandse Spoorwegen is a public limited company under Dutch law. Its registered offices are in Utrecht. NV Nederlandse Spoorwegen is the holding company of NS Groep NV.

The governance of NS, which is a State participation, is based on the modified two-tier company regime. NS has a two-tier management structure. NS Groep NV is managed by the Executive Board, which consists of the same people as the Executive Board of NV Nederlandse Spoorwegen. The Executive Board renders account for the execution of its tasks to both the Annual General Meeting and the Supervisory Board. The Executive Board is supervised by the Supervisory Board. Both the Executive Board and the Supervisory Board render account for the execution of their tasks to the Annual General Meeting of Shareholders.

## Shareholder

The sole shareholder of NV Nederlandse Spoorwegen is the Dutch State. The role of the shareholder is performed by the Ministry of Finance. The General Meeting is held annually, within six months of the close of the financial year.

The matters discussed at the General Meeting include the annual report by the Executive Board. The General Meeting also adopts the financial statements, approves the profit appropriation, discharges the members of the Executive Board from liability for their policy work, discharges the members of the Supervisory Board from liability for their supervision and instructs the auditor to audit the financial statements. Other general meetings can be held as often as is desired by the Executive Board, the Supervisory Board and the shareholder. Resolutions can also be adopted outside meetings.

## Corporate Governance Code

As a large corporation with an important public role of great significance in Dutch society, and with the Dutch State as our sole shareholder, NS is keen to stress the importance of openness and transparency. Although not a listed company, NS applies the Dutch Corporate Governance Code 2016 (hereinafter the 'Code'). Given that NS is not a listed company and does not have a one-tier management structure, several elements of the Code do not apply to it. On its [website](#), NS provides an overview of all the provisions in the Code plus explanatory notes on how NS applies those provisions.

## Executive Board

The Executive Board is charged with and responsible for managing the company. It reports to the Supervisory Board and the General Meeting. The Executive Board develops the vision and associated mission, strategy and objectives. The Executive Board is responsible for implementing the NS strategy. Implementation is partly handled by the business units and subsidiaries, with the executive directors of the business units and subsidiaries also bearing responsibility for this. Pursuant to the Articles of Association of NV Nederlandse Spoorwegen, the Executive Board Rules of Procedure and the Supervisory Board Rules of Procedure, certain decisions by the Executive Board are subject to approval by the Supervisory Board and/or the General Meeting. The Executive Board is responsible for managing the business in a transparent way.

Executive Board members are appointed in the General Meeting on the recommendation of the Supervisory Board. The Supervisory Board decides on the number of members for the Executive Board. Members of the Executive Board can be suspended or dismissed by the General Meeting. Members of the Executive Board are appointed or reappointed for a period of four years at most. The Executive Board aims for a composition that is diverse, with a good mix in terms of gender and age. The Executive Board saw several changes in its composition in 2019. Ms Susi (S.M.) Zijderveld stepped down on 1 May 2019. Ms Anneke (A.M.E.) de Vries was appointed member of the Executive Board with responsibility for

Stations and Risk effective 15 October 2019. The Executive Board currently consists of the following individuals: Mr Roger (R.M.L.H.) van Boxtel, Chair and CEO, Mr Bert (H.L.L.) Groenewegen, Member of the Board - Finance and Abellio, Ms Anneke (A.M.E.) de Vries, Member of the Board - Stations and Risk, Ms Marjan (M.E.F.) Rintel, Member of the Board - Operations, and Mr Tjalling (T.B.) Smit, Member of the Board - Commerce & Development.

The remuneration and terms and conditions of employment of the Executive Board members are established by the Supervisory Board with due regard for the remuneration policy adopted by the General Meeting. The remuneration policy for members of the Executive Board, to which reference is made in their respective employment contracts, includes the right to compensation upon dismissal on the initiative of NS, up to a maximum that has been fixed at one year's basic salary. Both the Executive Board as a whole and each individual Executive Board member are authorised to represent the company. The Executive Board's responsibilities, tasks and procedures are laid down in the Articles of Association of NV Nederlandse Spoorwegen and NS Groep NV, and in the Rules of Procedure of the Executive Board.

The Executive Board aims to achieve the objectives and ensure the continuity of the company and its affiliated enterprises. Based on the NS strategy, the Executive Board focuses on long-term value creation while weighing up the relevant interests of the stakeholders. That means that when making decisions, the Executive Board takes aspects such as safety and the role of NS in providing sustainable mobility into account, in addition to financial aspects. In cases where a (potential) direct or indirect personal interest of a member of the Executive Board conflicts with the interests of NS, that member will immediately inform the chair of the Supervisory Board and the other members of the Executive Board of such potential conflict. The member will disclose all relevant information, including information about any spouse, registered partner or other companion, foster child and relatives by blood or affinity to the second degree of consanguinity. Members of the Executive Board will not be involved in discussions or decision-making concerning a matter or transaction where their direct or indirect personal interests conflict with the interests of NS. If all members of the Executive Board have a direct or indirect personal interest that conflicts with the interests of NS and, as a result, the Executive Board is unable to make a decision, the decision will be made by the Supervisory Board. The Supervisory Board must give its approval beforehand to decisions by the Executive Board about such matters as entering into transactions which involve conflicting interests that are of material significance to NS and/or the Executive Board member in question. Such transactions are published in the report by the Executive Board, stating the conflicting interest. There were no such transactions in 2019. Transactions involving conflicts of interests of members of the Executive Board or Supervisory Board are agreed with conditions that are in line with the market.

The Company Secretary ensures that the proper procedures are followed and that the actions taken comply with the legal and regulatory obligations applicable to the Executive Board. This procedure was adhered to in 2019.

## The Supervisory Board

The Supervisory Board's tasks include supervising the Executive Board's policies and the general affairs of the company and its affiliated enterprises. It also advises the Executive Board. In performing its duties, the Supervisory Board focuses on long-term value creation for the company and its affiliated enterprises, taking into consideration the interests of the company's stakeholders. The Executive Board provides the Supervisory Board promptly with the information and resources the latter requires in order to do its work properly. If the Supervisory Board and/or a member of the Supervisory Board consider it necessary, they can obtain information from the Executive Board, NS Audit, the external auditor, the Central Works Council and/or other officials and external advisers to NS.

The Supervisory Board saw several changes in its composition in 2019. On 1 July 2019, Mr Paul (P.) Rosenmöller (vice-chair) stepped down upon termination of his term of office. Effective 1 June 2019, Ms Nebahat (N.) Albayrak took up her duties as a member of the Supervisory Board. In 2019, the Supervisory Board consisted of the following individuals: Mr Gerard (G.J.A.) van de Aast (chair), Mr Jeroen (J.J.M.) Kremers (stepped down on 26 January 2020), Ms Marike (M.) van Lier Lels (vice-chair), Ms Janet (J.L.) Stuijt, Mr Pim (W.J.) van der Feltz, Ms Nebahat (N.) Albayrak (from 1 June 2019) and Mr Paul (P.) Rosenmöller (until 1 July 2019). On 1 January 2020, Mr Herman (H.) Dijkhuizen was appointed member of the Supervisory Board of NS and chair of the Risk and Audit Committee. He filled the vacancy that had arisen after Mr Kremers stepped down on 26 January 2020 after having served as member of the Supervisory Board for two full terms.

The Supervisory Board's responsibilities, tasks and procedures are laid down in the Articles of Association of NS, the Articles of Association of NS Groep NV and the Rules of Procedure of the Executive Board, the Supervisory Board and its committees. The Supervisory Board as a whole is responsible for the proper implementation of its tasks. Supervisory Board members are free to adopt positions independently from the Executive Board. Members of the Supervisory Board perform their duties without a mandate and independently of any personal interest in the company. At least once a year, the Supervisory Board discusses the performance of the Executive Board as a body and the performance of the individual members of that board.

Supervisory Board members are appointed by the General Meeting, on the recommendation of the Supervisory Board, with due observance of the job profile and after consulting the Central Works Council. The Central Works Council has enhanced powers of recommendation covering the nomination of one third of the Supervisory Board members. The Supervisory Board has at least five members and at most nine. The Supervisory Board has drawn up a profile for its size and composition, taking account of the nature and activities of the company and the desired expertise and backgrounds of its members. The Supervisory Board aims for a composition that is diverse, with a good mix in terms of gender and age. The profile will be adapted as soon as that is required for it to accurately reflect current conditions. All of the Supervisory Board members are independent within the meaning of the Code.

Supervisory Board members can be appointed for two terms of four years each. After that period, they can be reappointed for a maximum of two terms of two years each. Reappointment after a period of eight years must be justified by the Supervisory Board in its report. In the case of a reappointment, the manner in which the relevant board member fulfilled their duties in the previous term is taken into account, and they will only be reappointed after careful consideration. The Supervisory Board's retirement schedule is published on the company's website.

Supervisory Board members must report any potential conflicts of interests relating to NS to the chair of the Supervisory Board without delay. If the conflict concerns the chair, he or she must report this without delay to the vice-chair. The member in question must disclose all relevant information, including the information relevant for the situation about their spouse, registered partner or other companion, foster child or relatives by blood or marriage to the second degree of consanguinity. Members of the Supervisory Board will not participate in discussions and decision-making about any matter or transaction where their direct or indirect personal interests conflict with the interests of NS.

## Committees of the Supervisory Board

In view of the extent, diversity and complexity of the matters it has to handle, the Supervisory Board has set up a Risk and Audit Committee and a combined Remuneration and Appointments Committee. The composition of these committees is determined by the Supervisory Board. The committees advise the Supervisory Board and prepare its decisions. This allows the committees to assist effective decision-making by the Supervisory Board. The Supervisory Board as a whole remains responsible for the decisions that have been prepared by a committee.

### Risk and Audit Committee

The Risk and Audit Committee (RAC) performs its duties in accordance with the Rules of Procedure as established by the Supervisory Board in accordance with the provisions of the Code. All Supervisory Board members are also members of the Risk and Audit Committee, and are independent within the meaning of the Code. The Risk and Audit Committee advises the Supervisory Board and prepares the Supervisory Board's decisions with respect to monitoring the integrity and quality of NS's financial reporting and the (assessment of the) effectiveness of NS's internal risk management and control systems. The Risk and Audit Committee convenes at least twice a year or as often as it deems necessary, and at least once a year with the external auditor without the Executive Board being present. The Rules of Procedure stipulate that the RAC must have at least three members.

### Remunerations and Appointments Committee

The combined Remuneration and Appointments Committee performs its duties in accordance with the Rules of Procedure as established by the Supervisory Board under the provisions of the Code. The Remunerations and Appointments Committee consists of four members, all of whom are independent within the meaning of the Code. The Remunerations and Appointments Committee currently consists of the following members: Ms Janet (J.L.) Stuijt (chair), Ms Nebahat (N.) Albayrak, Mr Gerard (G.J.A.) van de Aast and Mr Pim (W.J) van der Feltz. The Remunerations and Appointments Committee prepares the decisions of the Supervisory Board in areas such as the appointment of Executive Board and Supervisory Board members, the performance of the Executive Board and the Supervisory Board, and the formulation and implementation of the remuneration policy for the Executive Board.

The Remunerations and Appointments Committee draws up an annual remuneration report about (the implementation of) the remuneration policy for the members of the Executive Board. The Supervisory Board determines the remuneration for individual Executive Board members based on the proposals from the Remunerations and Appointments Committee and within the limits of the remuneration policy adopted by the General Meeting. The remuneration report can be found in the present report.

The Remunerations and Appointments Committee sets the selection criteria and procedures for appointing Supervisory Board and Executive Board members, as well as periodically reviewing the size and composition of the Supervisory Board and proposing a profile for its make-up. It is also responsible for the process for periodic appraisal of the performance of the individual Supervisory Board members, and presents proposals for their appointment or reappointment.

## External auditor

The external auditor is appointed by the General Meeting. The external auditor reports to the Supervisory Board and Executive Board on its audit. After the examinations and audit, the auditor issues an audit opinion regarding the truth and fairness of the NS financial statements.

The Risk and Audit Committee annually reports to the Supervisory Board on the performance of and developments in the relationship with the external auditor. The external auditor attends the meetings of the Supervisory Board in which its report on the audit of the financial statements is discussed, and is also available for the General Meeting, in which the adoption of the financial statements is handled. The external auditor also attends the meeting of the Supervisory Board held to discuss the six-monthly figures. In principle, the external auditor attends the meetings of the Risk and Audit Committee, unless that committee determines otherwise. The external auditor immediately informs the chair of the Risk and Audit Committee if, in the course of its audit task, it encounters any actual or suspected abuses or irregularities. If an actual or suspected abuse or irregularity concerns the functioning of an Executive Board member, the external auditor reports this to the chair of the Supervisory Board. EY has been the external auditor since the 2014 reporting year; its appointment lasts up to and including 2021.

## NS Audit

An independent and objective department, the internal audit function provides assurance and conducts consultancy assignments in order to realise added value for and improve the operational activities of the organisation. The internal audit function helps the organisation to realise its objectives by evaluating and improving the effectiveness of governance, risk-management and control by means of a systematic and disciplined approach. NS Audit falls under the Executive Board; it reports directly to the NS Chair and CEO and discusses the operational affairs of the department. NS Audit also reports to the chair of the Risk and Audit Committee. The NS Audit Director has direct access to the NS Chair and CEO, the chair of the Risk and Audit Committee, the members of the Executive Board and the external auditor.

Internal Audit keeps the Executive Board, Risk and Audit Committee and external auditor informed about:

- the implementation of the annual audit plan;
- any deficiencies in the effectiveness of the internal risk management and control systems;
- findings and observations that significantly affect the risk profile of NV Nederlandse Spoorwegen and its associated enterprises;
- shortcomings in the follow-up of recommendations by Internal Audit.

In 2019, the compulsory external test of the department was performed by the Institute of Internal Auditors, which issued a positive final opinion. This investigation is mandatory under the Quality Testing Regulations of IIA Nederland. The external auditor and NS Audit work together with due regard for their specific assigned duties.

## Governance and safety

NS has established a Safety Consultation Platform, which is chaired by the NS Risk Director. Line managers responsible for the business units, IT and security report to this central body on safety risks. The NS Risk Director makes sure that the chosen risk appetite is reflected properly in the management of the safety risks. One of the safety domains within NS is cybersecurity. The ongoing digitalisation of operational processes at NS has increased the significance of cyber issues. The Executive Board takes an active interest in this subject. It

supervises the implementation of the NS cyber strategy and has set up an investment programme to promote structural improvements. In addition, the cyber risks issue is the subject of a joint project with the Ministry of Infrastructure and Water Management and ProRail. NS co-chairs the recently established public-private European Rail partnership for cybersecurity.

## **Organising sustainability**

As leaders in sustainable mobility, we willingly take on responsibility for facilitating and realising sustainability in cooperation with partners. We do so by having NS business units develop plans and implement activities on the strategic themes of climate, circularity and inclusion. Policy and investment proposals must include assessments of their impact on sustainability. The Council for Sustainable Business Practices is NS's policy preparation body for sustainability issues. The Council is comprised of the business unit and staff department directors and its meetings are chaired by the Member of the Board for Commerce & Development. It receives advice from the Sustainable Business Practices Working Group, which includes representatives of the business units and staff departments. The Sustainable Business Practices Staff Department supports the Council, the Working Group and the business units, coordinating and stimulating the desired developments. Where necessary, proposed decisions and policies are submitted for approval to the Executive Board. Progress and development in sustainability results are monitored and managed through the regular planning, control and reporting cycle. The Sustainable Business Practices Council periodically discusses the KPI reports on sustainability results. In accordance with the Code, the Executive Board is responsible for the aspects of Corporate Social Responsibility that are relevant to NS. The Executive Board reports on this to the Supervisory Board and the General Meeting. Except for the appointment of a new Sustainability Director, no changes have occurred in the governance and organisation of sustainability in 2019.

# Risk management



Risk management is all about deliberately tackling uncertainties that could impede the achievement of the strategic objectives. To provide a picture of risk management at NS, this chapter looks at risk appetite, the organisation of risk management and the key risks.



## Risk appetite and risk tolerance

The risk appetite and risk management we are aiming for in six risk themes at NS can be found in what are called the 'risk appetite statements'. Each risk theme is linked to specific performance indicators with a quantitative bandwidth. Every year, the Executive Board evaluates and, if necessary, adjusts the risk appetite in each theme.

Category	Risk profile	Explanation, NS accepts
Safety	Averse	Zero or minimal deviations from safety objectives
Compliance	Averse	Zero or minimal deviations from integrity & compliance objectives
Operations	Averse	Zero or minimal deviations from operational objectives and franchise KPIs
Finance	Averse	Zero or minimal deviations from financial objectives
Reputation	Averse	Zero or minimal deviations from reputation objectives
Sustainability	Tolerant	Wider deviations from sustainability objectives

There are quarterly assessments and reports showing whether the NS-wide risk profile is still in line with the risk appetite. These reports show the risk profile for each theme in comparison with the defined risk appetite and the key (group-wide) risks that are monitored by the Executive and Supervisory Boards.

## Organisation of risk management

It is important for NS that the risk management system operates properly. To ensure permanent integral management of risks, risk management must move along with internal and external developments. In 2019, NS focused on improving the risk management process by quantifying the risks and incorporating them explicitly into the planning schedules and analyses.

NS uses probabilistic planning schedules and analyses to present a realistic picture of the future impact of uncertainties and risks, so as to gain better insight into the reliability of project-related plans, policy choices and risk budgets. This helps us to make better decisions. This approach was applied in several business units over the course of 2019, and will be rolled out more widely within NS in the year ahead. In addition, we worked on embedding Business Continuity Management in the organisation, and established a collaboration with ProRail for that purpose.

## Governance

Risk governance at NS has been set up using the 'three lines of defence' model. The guiding principle in this model is that the first line of defence (the operational business) is responsible for the management of the risks by embedding this properly in processes and clearly assigning responsibilities. The second line of defence, which involves the NS Risk department, provides support and advice and makes sure that line managers are fulfilling their responsibilities as intended. The third line of defence, involving the Internal Audit department, carries out independent checks to make sure that the risk management and internal control system is working properly.

In 2019, NS Risk continued its collaboration with various departments within the risk management function, including Integrity & Compliance, Cybersecurity and Legal. We jointly assess proposed policies and new investments, and advise the Executive Board. Additionally, we collaborate on a range of NS-wide risk analyses, taking stock of, prioritising and assigning responsibilities for risks in, for example, the cybersecurity domain.

In order to be demonstrably in control of key processes and systems, in 2019 NS continued work on the Internal Control Framework: a uniform system for documenting and monitoring processes/systems, the associated risks, and control measures and how they work.

The Risk department aims to set up integrated risk management together with specialists from the operational business, and to perform systematic risk assessments (by weighing risks up against the risk appetite). Integrated risk management consists of three pillars:

- actively supporting and supervising the management's efforts to take stock of and mitigate risks, for example through risk assessments;
- weighing up the risks during decision-making;
- analysing incidents that arose from deficiencies in risk management to learn from the mistakes made.

This ensures stronger control as it will help NS to detect potential issues or opportunities at an early stage and make targeted and proactive changes in response. We determine the degree of support by the second line of defence in these processes on the basis of a risk assessment that is made beforehand.

## Recording and reporting

Identified risks, including the risk owners, have been recorded in risk registers and assigned quantitative scores using a single, uniform risk matrix. Once a quarter, NS reports the main risks for each business unit and discusses them in the Executive Board as part of the planning and control cycle. We immediately report any risks that fall outside our risk appetite and escalate them where necessary. The Executive Board reports on and renders account for the risk management and internal control system to the Supervisory Board after discussing it in the Risk and Audit Committee.

## Corporate culture

Risk management is an issue that concerns us all, as it is part and parcel of our daily operations. Awareness of the work of the Risk team is growing within NS; colleagues from all departments and units know where to find the team, supported where necessary by NS Risk.

NS Risk provides risk management training programmes to enable colleagues to tackle risk management issues themselves. A syllabus with instructions for staff on how to carry out the risk management process themselves will become available in 2020.

NS Risk is an independent unit that is also an integral part of NS. It informs, challenges, takes stands and provides both solicited and unsolicited advice based on its knowledge of NS and without judging. The department helps come up with solutions that do justice to the various interests and help NS implement its strategy.

## Group risks

As part of the planning and control cycle, the Executive Board has determined the principal group risks based in part on the risks that have been identified within the business units. The Board has looked at how these risks affect the achievement of the strategic objectives and the material themes. The group risks are discussed in detail below, as are changes in the risk profile compared with 2018. For the financial risks, please refer to the 'Financial risk management' chapter in the financial statements.

## Key changes in the risk profile compared with 2018

Visible improvements have been made in the control of the risks associated with non-compliance, HSL South, improvement capacity and insufficient operating results. Progress was made in 2019 in terms of both structure and corporate culture in the area of compliance, resulting in improved risk management. Thanks to solid performance on HSL South in the second half of 2019, following resolution of several issues including the software bug and process optimisation, the franchise targets have been realised and control has improved. We improved control of improvement capacity risks by paying constant attention to portfolio management and by implementing changes to set-ups. Regarding the operating result risks, the profit in 2019 was higher than expected and more savings have been realised than were included in the business plan.

Control of risks associated with infrastructure and investments abroad has deteriorated. For Infrastructure we expect to see a rise in the number of bottlenecks in the required infrastructure, with adverse effects on our train services and on our ability to accommodate further growth in passenger volumes and realise our ambitions. As regards investments abroad, there is a downward control trend caused, especially in Germany, by increased personnel expenses under a new collective labour agreement, and penalties arising from works on the infrastructure.

## Looking ahead to the group risks in the future

The overview below shows the main group risks classified according to the six risk themes that NS uses. The main risks for the group in 2019 are found in four of the six risk themes. The overview also shows the trends in the control of these risks.

Risk theme	Main group risks	Trend
<b>1. Safety</b>  <b>Averse</b>	<b>Safety:</b> not fulfilling our duty in cases of major safety incidents involving passengers and/or staff	
<b>2. Compliance</b>  <b>Averse</b>	<b>Non-compliance:</b> not complying with legislation and regulations or exceeding applicable norms and values.	
<b>3. Operations</b>  <b>Averse</b>	<b>HSL South:</b> failure to achieve agreed results on HSL South.	
	<b>Infrastructure:</b> inconvenience to customers caused by lack of infrastructure capacity and quality improvement backlog.	
	<b>Introduction of ERTMS:</b> disruptions to the implementation process causing problems for customers.	
	<b>IT reliability:</b> failure to meet the operational and security requirements for IT systems.	
	<b>Capacity for improvement:</b> providing improvements too late or with insufficient results.	
	<b>Staff shortages:</b> discontinuity in crucial processes due to lack of staff.	
<b>4. Finance</b>  <b>Averse</b>	<b>Insufficient operating results:</b> inadequate operating results and not enough operational cash flow generated to finance the plans.	
	<b>Market regulation:</b> losing parts of the business activities and the contributions they make to the result.	
	<b>NS investments abroad:</b> insufficient operating result from investments abroad.	
<b>5. Reputation</b>  <b>Averse</b>	The main group risks do not concern the theme of Reputation.	
<b>6. Sustainability</b>  <b>Tolerant</b>	The main group risks do not concern the theme of Sustainability.	

-  **Trend improved**
-  **Trend unchanged**
-  **Trend worsened**

# Risk 1: Safety

## Description

The risk that NS fails to take sufficient measures in the Netherlands to prevent safety incidents, or fails to properly fulfil its duty of care if a serious safety incident occurs involving passengers, employees and/or the locality due to non-compliance with safety procedures or abuses of processes by malicious individuals.

## Explanation

'Safety' covers ten safety areas: safety on the railways, personal safety, occupational safety, fire safety, transfer safety, information security, rolling stock safety, environmental safety, food safety, and security (including antiterrorism measures).

Given its importance for safe and effective operations, safety will always remain a focal point. NS seeks to transport its passengers safely, ensure their safety at stations and offer its staff a safe workplace. We started a programme for further improvement of our safety culture in 2015. NS aims to grow develop a proactive safety culture in the long term and made further progress in this direction in 2019.

## Measures

Rail travel is one of the safest forms of mobility. NS seeks to continue improving safety by focusing on two elements: control of the safety risks and continuous improvement of safety performance. To ensure effective control across all the operations involved, we have assigned clear governance roles to the various business units alongside the central Security function. Significant progress has been made, but further growth is still needed to attain the required level of maturity.

Improvements have been implemented in various safety areas, which has increased safety. As regards occupational safety, we use Risk Assessments and Evaluations as a framework for improvement measures, with close involvement of the Executive Board and management team through initiatives such as safety walks. This has contributed to a further reduction of the number of occupational accidents per million of worked hours (the Total Recordable Rate), from 5.3 in 2018 to 4.5 in 2019. In addition, the chromium-6 programme focuses not just on carrying out the current work safely, but also on investigating the working conditions at NS in the past.

As regards safety on the railways, following the installation of ORBIT in trains, the driver receives an acoustic signal when approaching a red signal too fast. This should help to reduce the number of SPADs. ORBIT was installed in all SLT type Sprinter trains in 2019. We have outlined two potential approaches for the system improvement that is required to eliminate dependency on the driver taking the right actions. We are currently testing those two approaches in collaboration with ProRail and the Ministry of Infrastructure and Water Management and plan to take a joint decision in 2020.

As regards personal safety, check-in and check-out gates are being taken into operation at more and more stations, which is helping to increase safety on trains and at stations. In September, the powers of Safety & Service staff at the stations were reformulated to also allow them to intervene in shops and in bicycle parking facilities.

NS maintains links with various government bodies, including the National Coordinator for Counterterrorism and Security (NCTV), the Police and the National Cyber Security Center (NCSC), and is kept abreast of external developments in the security landscape.

According to the NCTV, the risk of an attack on the railways remains real. The attack in a tram in Utrecht on 18 March 2019 is a reminder that we need to remain alert. NS continuously updates its counterterrorism policy and plans based on the latest information,

in partnership with the government and ProRail. This concerns both preventative and restorative measures (limiting damage and ensuring quick recovery). In order to strengthen preparedness in the face of potential terrorist threats or attacks, we conducted joint exercises with ProRail and relevant safety partners in 2019, as in previous years. As regards ICT security, NS uses a roadmap to update and monitor cyber risks (see Risk 6).

### **Risk control trend**

The safety of our staff, passengers and environment is a top priority. The developments sketched above mean that the level of control remains sound and has actually improved in various respects. Despite the measures taken, NS cannot rule out safety incidents occurring. According to the NCTV, the general threat of terrorist attacks in the Netherlands has decreased, but remains considerable.

## **Risk 2: Non-compliance**

### **Description**

The risk that NS fails to comply with laws and regulations or that NS violates (internal) norms and values, which may result in disadvantages for passengers, staff or other stakeholders, reputational damage, financial losses or sanctions imposed by regulatory authorities.

### **Explanation**

NS aims to ensure effective control of its business operations, in which incidents are rare occurrences and regulatory compliance is safeguarded. To keep the number of incidents to a minimum, NS needs to fulfil a number of conditions. We need to create a safe environment in which we can openly discuss incidents and investigate their causes in a way that enhances our understanding. Learning from incident reports and occurrences allows NS to generate insights and take measures to prevent recurrences.

New and changed regulatory requirements must be translated into specific policies that we can then implement in our organisation with supporting processes and systems.

### **Measures**

In order to remain on top of compliance within the organisation and further reduce the risk of non-compliance, NS took further compliance control measures in 2019. These measures included:

- introduction of compliance-related KPIs in several fields characterised by high inherent risks, such as competition, public procurement, privacy and hiring external staff. We have set quantitative targets for each of these topics, and monitor them permanently;
- monitoring of compliance risks and issues. These concern potential non-compliance with laws and regulations, and are presented from within the business based on current developments in operations, and the associated measures. High-impact compliance risks and issues are also discussed in the Executive Board and the Supervisory Board;
- shows the current status of the compliance-related KPIs, risks and issues. We also use the dashboard to monitor current developments in the field of compliance, such as the introduction of new laws and coordination with regulatory authorities. The information from the dashboard is presented to and discussed within the Executive Board and the Supervisory Board on a quarterly basis.

Alongside these measures, we have continued the measures already launched back in 2018. The Regulations for Reporting Integrity Issues serve as the framework for dealing with integrity violations. In 2019, all reports were processed in accordance with those regulations and appropriate measures were taken. NS has also launched a nationwide programme for tackling undesirable behaviour such as harassment and discrimination through a regional and team-based approach. This should lead to permanent improvements in the social culture within NS.

Additionally, NS held sessions in all parts and at all levels of the organisation to promote an open and safe corporate culture and to address any questions or dilemmas within particular teams of departments. We also ran a number of internal campaigns on compliance in the fields of competition, privacy and information security, aimed at securing the requisite level of knowledge among all relevant NS employees.

## Risk control trend

Compliance management attracted a great deal of attention in 2019 as part of NS's planning and control cycle. This is a component of the company's long-term programme aimed at anchoring integrity and compliance more firmly in its structures and processes. The measures taken in 2019 serve as the foundation for a full-fledged compliance management and monitoring mechanism. As a result, the management of non-compliance risks has greatly improved.

## Risk 3: HSL service

### Description

The risk that the performance delivered falls short of the agreed level due to lack of capacity, the complexity of HSL South and/or an inability to implement the measures taken. The agreement with the Ministry of Infrastructure and Water Management about the performance on HSL South covers both operational performance and the introduction of new products.

### Explanation

The agreements made between the Ministry of Infrastructure and Water Management and NS about our performance on HSL South are highly ambitious, given the complexity and limitations of the infrastructure, the shortage of rolling stock and the age of NS's existing trains. Other important risk factors include the sharp increase in passenger numbers, ambitious KPIs, the impact of extreme weather conditions (including extreme summer heat), external incidents and fragmentation of HSL-related knowledge.

In 2018, the Ministry of Infrastructure and Water Management made €60 million available for measures aimed at improving the HSL South infrastructure in the short and medium term. Furthermore, NS and ProRail drew up a long-term vision for the HSL corridor in 2018 and presented it to the Ministry of Infrastructure and Water Management. In this vision, NS and ProRail elaborated on a series of measures aimed at making lasting improvements to the performance of HSL South and bringing performance up to a par with the main rail network. It is important that the funds made available are actually spent on measures to raise performance levels.

In the second half of 2018 and early 2019, the HSL South timetable was disrupted by a persistent software bug in the locomotives that led to stranded trains and a fall in

punctuality. Since the supplier produced a software update to eliminate the bug, in March, and further process optimisation measures were taken, performance has greatly improved. The New Generation Intercity trains will be introduced with the 2021 timetable. Their phased introduction over 2021 and preparations in 2020 may cause some initial dips in performance.

## Measures

Operational performance levels remain variable. All the operational disciplines at NS are looking into this, and a change in governance has been implemented for the entire high-speed line. In addition, the improvement programme and improvement teams continue their permanent monitoring and efforts to stabilise performance at the highest possible level, taking any additional measures necessary and spurring on improvements in the operations. The New Generation Intercity trains will be introduced with the 2021 timetable following an extensive and carefully planned implementation process that also includes training. NS will keep its current rolling stock on standby.

## Risk control trend

The risk trend improved in 2019. Thanks to improved performance in the second half of 2019, following resolution of several issues (including the software bug) and process optimisation, the franchise targets have been realised. However, the KPIs are sensitive to risk factors such as future updates for rolling stock software and complicated infrastructure. From 2020 the risk looks set to increase once again, due to rising passenger numbers and potential effects from the renovation of the Watergraafsmeer shunting yard. The structural issues will require patience and NS is accordingly giving the improvement of HSL South performance its full attention.

# Risk 4: Infrastructure capacity

## Description

The risk that NS is unable to implement the desired timetable (including future extensions) in a robust, punctual and cost-effective manner due to limited infrastructure capacity. This concerns limitation in terms of both the quantity of infrastructure and the extent to which it can be used. As a result, NS would be unable to realise its ambitions for growth, implement the desired operational improvements to the extent required, and accommodate the expected rise in passenger numbers.

## Explanation

In implementing its timetable, NS is dependent on access to sufficient and reliable rail infrastructure. NS will not be able to accommodate the growing passenger volumes and effect the timetable extensions required for that without expansion of the available infrastructure. However, the timely completion of the necessary infrastructure has come under pressure. This is due to a considerable extent to the fact that the actual and anticipated level of investment is much lower than is required for NS to continue accommodating the upward adjustments of passenger volumes. Other important factors include the rising prices charged by contractors, increasingly stringent environmental legislation (concerning nitrogen, PFAS, noise etc.) and the complex interconnections between many different large-scale infrastructure projects, as a result of which a minor delay in one project may cause considerable disruption in another. In addition, the expected increase in freight transport by train will result in further pressure on the available infrastructure. Finally, withdrawals from service result in the prolonged unavailability of parts



of the infrastructure. The many anticipated renovation projects in and around Amsterdam, The Hague, Zwolle, Geldermalsen, Rotterdam and elsewhere and the adaptations to the infrastructure required for the roll-out of ERTMS mean that a whole series of major withdrawals from service are in the pipeline, on top of those required for regular maintenance.

In addition to the risk of insufficient infrastructural capacity for the NS timetable, there is a risk that the usage capacity of the existing infrastructure will also be affected. This is caused by a range of issues, including restrictions in the supply of traction power (limiting frequency increases and the deployment of modern rolling stock), problems in the detection of modern rolling stock, interfering currents, vibrations (in relation to the weight of trains ('axle loads') and the concerns over track stability that have recently emerged. These issues are already causing restrictions in terms of the speed and deployment of trains. Tightened environmental standards (regarding particulate matter, noise or vibrations, for example) may also cause restrictions. Finally, there is a risk that the introduction of ERTMS will reduce the usage capacity of the tracks (while its very purpose is to increase capacity). This is because ERTMS may cause more system failures in the initial years following its implementation, or because the system reduces the usable length of platforms of shunting tracks.

## Measures

NS draws up an Annual Asset Plan in which the timetable design is combined with the rolling stock, staff and infrastructure (including processing and shunting capacity), looking at both the short term and the long term. This allows NS and ProRail to ensure integrated management of infrastructure needs in the longer term, and gives them time to look for suitable alternatives or mitigating measures, if necessary. A regular process ('MLT') is used to align developments concerning the timetable at NS and the necessary developments in the infrastructure at ProRail. Based on our rolling stock fleet planning, we develop and assess various future scenarios and then share them proactively with the Ministry of Infrastructure and Water Management and ProRail. NS is also collaborating with ProRail to make sure the Randstad conurbation remains accessible during works on the track. Examples of this are the joint programme management to limit disruptions for customers within the so-called Amsterdam Diamond (the area between Schiphol Airport, Amsterdam Zuid, Amsterdam CS and Weesp) and the active role of NS in the sector-wide Toekomst Bestendig Werken aan het Spoor (TWAS) programme.

## Risk control trend

Controlling infrastructure-related risks is a complex challenge, since the principal management and other decisions are taken at ProRail and the Ministry of Infrastructure and Water Management, beyond the direct influence of NS. Although NS, in 2019, was able to exert more influence by strengthening its focus on the control measures mentioned above, the fact remains that the risks develop beyond its direct control and increased in the infrastructure capacity field in 2019, despite the extra focus on control measures. We therefore expect to see a rise in the number of bottlenecks in the infrastructure, with adverse effects on our train services and on our ability to accommodate further growth in passenger volumes and realise our ambitions.

## Risk 5: ERTMS

### Description

The risk is that the introduction of ERTMS results in disruption for customers. Another risk is that the implementation of ERTMS fails to yield the desired results in the fields of safety, reliability, interoperability, capacity and speed. Replacing the train safety system on the Dutch railways is a major and complex programme that is bound to have an impact on NS. The roll-out of ERTMS will take many years. During this period, both the traditional safety system (ATC, automatic train control) and ERTMS will have to be used in parallel. Risks in the shorter term concern the proper installation of the system in our trains and its implementation within the organisation at large.

### Explanation

The introduction of ERTMS in the Dutch rail sector (NS, ProRail and other carriers) is being coordinated by programme directors who were installed by the Ministry of Infrastructure and Water Management at ProRail. At NS, a programme team has been set up to implement ERTMS within NS. The introduction of ERTMS is a complex challenge as it comprises technical, operational and organisational elements. Its implementation in the Dutch railway system will result in changes for the infrastructure operator and for all carriers. Both the infrastructure and the trains have to be modified to make sure that ERTMS can be implemented. On top of that, a large number of employees will have to be trained in working effectively within the context of the new system. ERTMS will be rolled out and ATC removed per track section. Alongside ERTMS, the current ATC will remain in use during the roll-out until all track sections have been equipped for ERTMS, in around 2050. In the years ahead, the development of ERTMS as a European train safety system will continue.

### Measures

Upon the introduction of ERTMS, the programme directors opted for an approach that prioritises due care over speed. Combined with the joint quality management system, a detailed phased migration plan helps to reduce the risk of disruptions for passengers and of not achieving the ERTMS objectives. NS has taken measures to safeguard careful preparation of the steps in the migration process.

In addition, NS is preparing the introduction of ERTMS in close collaboration with the ERTMS programme directors, ProRail and the other carriers. The ERTMS programme team recognises the risks and is mitigating them. To that end, it has set up a governance structure that ensures the high-level involvement of all the business units concerned. We are applying tried-and-tested introduction methods that were also used for recent rolling stock launches.

### Risk control trend

The measures that have been taken have further reduced the risk of disruption for customers. Various other measures suggested by NS to minimise the fall in operational performance or unacceptable disruption for customers have been included in the proposed programme decisions. NS manages the risk that the implementation of ERTMS may not deliver the expected results in partnership with the ERTMS programme directors. It is too early to discern a trend, as the actual roll-out will take years to complete.

## Risk 6: IT reliability

### Description

Both operational and security requirements (the risk of cybercrime in particular) fuel a continual demand for further development of our IT systems. Given the tight labour market, we may not be able to find enough staff with the right levels of expertise, in which case not all IT systems would satisfy the requirements. The consequence of this would be that NS fails to live up to its strategic ambitions and cannot guarantee the continuity of its service.

### Explanation

We need reliable IT systems for running our timetable and delivering sufficient services to our customers. IT is an increasingly important and critical factor in running NS's operations, in particular in the provision of information for our passengers, and in timetable control and adjustment. Our ability to facilitate this rests on three cornerstones: a stable, efficient and scalable IT infrastructure; sufficient and qualified staff; and systems that are sufficiently manageable. There are currently risks for each of these cornerstones. Legacy systems are an issue for a stable, efficient and scalable IT infrastructure. In an increasingly tight labour market, recruiting and retaining the right staff is a growing risk. And manageability is negatively affected by strong dependence on external suppliers.

### Measures

Outdated business applications will be replaced as necessary. We have set up separate programmes for highly critical systems for this. In addition, we are running long-term programmes for the development of cloud infrastructure and data platforms. For the recruitment of staff, NS collaborates intensively with training institutions and staffing agencies. Centralisation and sound architecture are used for keeping the IT environment manageable. NS is continually investing in strengthening its cybersecurity.

The Recruitment department runs intensive IT labour market campaigns to recruit new IT staff. In these campaigns, NS is presented as a socially relevant employer that offers an attractive IT domain for new recruits.

Based on the cyber roadmap, NS has made several important steps towards increasing its resilience to cyber-attacks.

### Risk control trend

In 2019, we made huge strides in the replacement of critical systems, such as the phasing out of the old train control system, and in the management of cyber risks, although we will need to continue developments in this field.

## Risk 7: Improvement capacity / agility

### Description

The risk is that the programmes to promote behavioural and cultural change do not deliver the desired result, or not in time, as a result of which NS is unable to realise the desired growth in the fields of safety, integrity and costs.

## Explanation

We have started a number of organisational and other changes in order to improve the service provided by NS and achieve the operational targets. Making the right choices every time remains a challenge because of dependencies between various improvement initiatives. What is more, the underlying processes at NS are very complex. Finally, a number of improvements also require a change in how staff behave. All of this means it will not always be easy to achieve the required changes on time and in full. The focus on integrity, safety and behaviour based on the Hearts & Minds methods - through teaching programmes, training sessions and management attention - has generated a measurable increase in awareness. NS has moved up on the H&M culture ladder from a 'reactive' to a 'calculative' culture. The challenge now is for our HSE culture to develop further to 'proactive' level.

## Measures

NS's effectiveness is increasing further. By managing the project portfolio, we are able to detect and address bottlenecks in good time. In addition, we are holding discussions with the employee participation bodies and trade unions about NS's long-term strategy and the changes this necessitates based on the change agenda. The agility of NS and the 'employee of the future' are explicit themes in these meetings. Following a series of trials, in 2019 a number of important set-up changes were implemented in the operations; their implementation is still demanding our attention. Action plans to promote a safety culture and integrity have been drawn up and are being implemented, with quarterly progress monitoring. As part of the strategy process, an overall NS-wide action plan has been formulated that focuses on an integrated approach to creating support for and anchoring change. Despite results in several fields, the effort will need to be accelerated. The dilemmas that will have to be resolved to make this possible have been placed on the agenda of the Executive Board.

## Risk control trend

Control has improved thanks to enhanced portfolio management and the above-mentioned developments. To maintain NS's high level of service, achieve the operational targets and meet the increasing demand for better financial returns, additional improvements are essential.

# Risk 8: Staff shortages

## Description

The risk is that NS is confronted with staff shortages at points within its organisation where this may cause discontinuity in the implementation of crucial processes.

## Explanation

NS and indeed the country as a whole are feeling the effects of labour shortages. Up to 2022, the number of job vacancies will remain higher than the number of new employees who can fill them. At NS, the rate at which job vacancies are being filled and the time until they are filled have remained stable, despite the shortages on the labour market. However, our ability to find staff for future job vacancies at IT, Technology, Train Modernisation, Commerce, Network Development and Retail is a source of concern. Among staff on the trains, chief guards and train managers international will become difficult to find. Given the age structure of the current workforce, we expect to see a high outflow of retiring staff and lower levels of flexibility in assigning staff to trains over the next five years. Another relevant aspect is the increase in sickness absence, which fuels demand for additional capacity.

Measures

NS has drawn up strategic staff planning schedules and taken measures such as more frequent rolling stock reviews and succession planning. Short-term campaigns have been set up to prevent further growth in sickness absence. Managers are receive coaching and guidance from case managers to deal with complicated absenteeism cases. A special sickness absence task force conducts in-depth studies into the causes and prevention of absenteeism, monitors the progress made and issues weekly reports. In addition, the sustained employment approach as a whole is subjected to an external re-assessment, and we are working on the details of an action plan for the medium and long term to keep our employees healthy and vigorous.

### **Risk control trend**

Following a decrease in 2018, this risk increased once again in 2019. While staff shortages were manageable in 2019, they may rise further in the years ahead despite NS's growing appeal as an employer. There is a fierce battle for talented people on the market. In addition to that, we should continue our focus on strategic forecasting and weighing the options available for dealing with labour market shortages and normalisation of sickness absence.

## **Risk 9: Inadequate operating result**

### **Description**

The risk that, due to costs rising faster than revenues, NS fails to achieve the required return on investment. This would lead to NS generating inadequate operating results and operational cash flows, rendering the company unable to finance its strategy in the future.

### **Explanation**

In the past few years, NS has invested substantially in order to achieve systematic improvements in operational performance. NS is also investing in new rolling stock and upgrades to existing rolling stock to cope with the growth in passenger numbers and the forecast growth in the years ahead. NS's cost structure is relatively fixed because of the company's capital-intensive nature. Over the next few years, NS will have to invest substantially to facilitate the growth in passenger numbers and fulfil its franchise obligations and undertakings to its stakeholders. As a result, costs will increase, putting additional pressure on the result, although the operational cash flow will remain stable. Retaining a good rating is important if we are to attract financing.

### **Measures**

Using integral coordination based on clear-cut company objectives, NS has started initiatives in the financial functions, support staff departments and business units aimed at improving results and promoting a cost-aware culture. As well as financial interests, we also take account of the interests of society and the commercial sector, looking at staff, the deployment of rolling stock and the service model.

### **Risk control trend**

NS takes measures to improve the results, aimed at increasing productivity and revenue as well as reducing the costs of indirect and support staff activities. In recent years, improving the result had lower priority than improving the operational performance. To that end, major investments will be made in the next few years, for example in rolling stock and IT. In 2019, the need to have healthy returns was given a higher priority again now that our operational performance is up to standard; this will enable NS to continue financing its investments and plans for the future independently and keep rail fares affordable. However, the initiatives to improve our returns have not been fully implemented yet.

## Risk 10: Market regulation

### Description

The risk is that the government decides on a different set-up for market regulation of the rail sector, including the scope of the main rail network, HSL South, the approach to open access and the position of NS Stations after 2024, which would affect NS's business operations and put pressure on the performance delivered to passengers. The government minister responsible for Infrastructure and Water Management has announced that a decision on the market regulation of the rail sector after 2024 will be taken in mid-2020.

### Explanation

The coalition agreement contains several intentions regarding the regulation of the railways that might affect NS. For example, the government is investigating the possible decentralisation of four railway lines. The Ministry of Infrastructure and Water Management has also announced a number of studies that should help it decide on the regulation of the rail sector. For example, it will be looking at the ownership and operation of stations and the study of HSL South that is being conducted, as well as to open access and a level playing field. The outcomes of the midterm review will also be taken into account.

### Measures

Various improvement programmes are being implemented within NS. Their effects are evident in improved performance, both in train services and in improvements in and around the stations. NS is also on schedule for achieving its performance agreements. However, performance on HSL South is disappointing, due in part to the complexity of the interplay between the infrastructure and rolling stock. Furthermore, NS is working continuously on improving its services to passengers. NS is cooperating with the ministry's preparatory studies for the decision on market regulation of the rail sector after 2024.

### Risk control trend

Uncertainty concerning market regulation remains as great as ever. NS is committed to ensuring that it can continue delivering a good level of performance.

## Risk 11: NS's investments abroad

### Description

There is a risk that NS's investments abroad cost money rather than bringing in money.

### Explanation

Abellio is a fully-owned subsidiary of NS that operates in the passenger transport markets in the United Kingdom and Germany. NS invests in these markets through this subsidiary. Abellio's priority is to achieve positive financial results and offer a high-quality product to local passengers and passengers travelling to and from the Netherlands, by controlling risks effectively and making sure that investments remain within the Capital-at-Risk framework. This framework, which was agreed with the Ministry of Finance in 2016, limits the size of the investments abroad by NS and the guarantees provided by NS.

## United Kingdom

In 2019, the ScotRail and Greater Anglia franchises in the United Kingdom yielded disappointing financial results. This effect was set off by adding the East Midlands franchise to the portfolio with effect from 18 August 2019. Despite various improvement initiatives, passenger revenues are lower than expected due to:

- a. disappointing economic growth, in part owing to persistent uncertainty surrounding the consequences of Brexit;
- b. passenger patterns deviating from historical trends, which has resulted in disappointing growth in passenger numbers compared with the expectations at the time of the bids;
- c. dependence on Network Rail for the timely completion of infrastructure-related projects required to ensure timetable efficiencies that will help us accommodate growing passenger volumes.

Another issue in the Greater Anglia franchise is a dispute with the franchise authority about a risk-sharing mechanism that is resulting in an increase in the franchise fee. Finally, due in part to the delayed delivery of new trains and infrastructure issues, performance on the track is not up to the level agreed with the franchise authority and has also failed to meet the expectations of the public.

## Germany

In Germany, revenue growth will be achieved over the next few years from €534 million in 2019 to approximately €800 million once all contracts are fully operational. This is due to a number of franchises won that will enter into operation between June 2019 and June 2020. Preparations are required during the mobilisation phase prior to operation, such as recruiting and training staff, purchasing trains and establishing workshops for the maintenance of trains. The substantial investments and mobilisation costs required affect the result because growth is so rapid. NS recorded start-up losses in Germany in 2019. In addition to high start-up and mobilisation costs, labour market shortages in Germany and new collective labour agreements led to higher personnel expenses and increased the need for staff on the trains. Combined with extensive maintenance work on the infrastructure, the shortage of first-line staff resulted in a higher penalties imposed by public transport authorities due to train cancellations and lower punctuality rates. The franchise authority compensates carriers through a price indexation for cost increases, but the current indexation does not cover the costs arising from the reduction in working hours, for example. The carriers are consulting with the franchise authorities on an adjustment of the index and a penalty system that only penalises issues within the carrier's control.

## Measures

Based on the agreements made with its shareholder, NS limits the financial risk associated with Abellio's operations to providing group guarantees and the invested capital within the Capital-at-Risk framework. The size of the risk for certain franchises in the United Kingdom is kept down by entering into strategic partnerships, as in the Greater Anglia franchise where Mitsui has a stake of 40%, and the West Midlands franchise where Mitsui and Japanese Railways East (JRE) have a joint 30% stake. Furthermore, Abellio has started various initiatives that should support the operating results.

In Germany, the mobilisations and efforts to optimise operations are being prepared thoroughly using a programme approach with experienced managers. Programme execution is also closely monitored so that the risks of delays and budget overruns can be managed.

The experience and lessons learned from previous mobilisations are also incorporated in the programme approach for new mobilisations. If Abellio is to generate a reasonable return in the German railway market, it is essential that agreement is reached with the franchise authorities on adaptations to the personnel expenses index and a penalty system that only penalises issues within the carrier's control.

### **Risk control trend**

The above-mentioned measures will bear fruit in the short and medium term. We still expect that all franchises will make a positive contribution to the result over the course of their term. There are no onerous contracts at present, even though Abellio Germany and ScotRail both did operate at a loss in 2019.

## **NS and taxes**

### **Social responsibility**

Taxes are the most important source of income for governments, which they use, among other things, to fund general facilities. These general facilities, such as the railway infrastructure, are vitally important to NS.

### **Guiding principles for the tax policy**

NS operates in accordance with tax and other laws and regulations. As such, given its duty to adopt a socially responsible approach to taxation, NS takes the position that the aim and the purpose of the law must be taken into account. This means that it does not merely observe the letter of the tax law. A responsible approach to taxation means that no structures should be set up that have tax savings as their primary goal. Transactions should only take place if they serve a genuine commercial purpose. That is the case if the tax consequences of such transactions are proportionate to the commercial consequences, both in a qualitative sense (regarding complexity) and in a quantitative sense (regarding the financial impact).

NS is an organisation with a prominent role in Dutch society, and all of its shares are held by the Dutch State. Being a State participation entails special responsibilities.

For the business operations where NS is in competition with other market parties, it is important to ensure a level playing field also from a tax perspective. Taxes are one component of the operating costs in franchises and these costs are therefore examined closely. On the one hand, we want to make sure that we are complying with the applicable tax legislation; on the other, we aim to make use of tax incentives, for example for research and development or sustainable investments.

### **Relationship with the tax authorities**

NS believes it is important to have good relationships with the tax authorities in all countries where it has operations. For instance, in 2010 NS concluded a compliance covenant with the Dutch Tax and Customs Administration. This agreement enables 'horizontal monitoring' of NS by the Tax and Customs Administration. The core concepts are mutual trust, understanding and transparency. Pursuant to this covenant, prior to carrying out a transaction or submitting its tax return NS consults with the Dutch tax authorities on potentially contentious standpoints. The aim is to remain as up-to-date as possible so that NS has a clear view of its tax position at all times. NS discusses matters with the Dutch tax authorities on a quarterly basis.

It also takes a proactive approach to tax matters in other countries. If there is any uncertainty, the tax authorities are contacted so that agreement can be reached on important topics. In the United Kingdom, for example, Abellio has a Customer Compliance Manager at HRMC, should Abellio need to discuss current issues.



## Governance

The Executive Board has an overview of all tax matters at NS. The tax function within NS is set up in such a way that all important decisions concerning tax matters are assessed by NS's tax department and that the company complies with its tax obligations in all countries. The NS Tax department works with the Executive Board, the business units and the Dutch Tax and Customs Administration in a consulting and coordinating capacity. The department is also the first point of contact for tax matters for other internal and external stakeholders. Outside the Netherlands, the Tax department's contacts with the tax authorities are generally arranged via the local subsidiaries. The Tax department reports to the NS Finance Director. The Tax department regularly engages the services of external tax consultants in order to obtain a second opinion on important tax issues, acquire specialist knowledge, improve understanding of new tax legislation and obtain assistance when setting up and modifying tax management processes.

Abellio manages its local tax obligations via its financial departments, and hires in external consultants where necessary for tax compliance and country-specific tax issues. External consultants are engaged mainly in the case of complex issues or issues where there is a great deal of uncertainty. The boards of Abellio in the United Kingdom and Abellio in Germany have a complete overview of domestic tax affairs and ensure regular communication and coordination with the Executive Board and NS Tax department.

## Acceptability of tax risks and risk management

NS aims to ensure timely submission of correct tax returns and timely payment of any taxes due. However, given the extent of its operations and the associated tax obligations, common tax risks inevitably arise in its processes. The NS Executive Board has defined its risk appetite in eight thematic areas. Tax risks are covered by the themes of 'Integrity & Compliance' and 'Reputation'. The risk appetite for both themes has been determined to be 'averse', which is deemed appropriate given NS's duty to act responsibly in the matter of taxes. This governance should also provide for measures to control tax risks. To that end, the risks are identified, assessed and managed. The risks are discussed with the Executive Board, and measures are taken to make them compatible with NS's risk appetite.

## Transparency

NS is transparent about its tax position. The annual report shows the amounts paid by NS in corporate (income) tax, payroll tax and VAT per country. The financial statements also specify the effective tax rate for corporate (income) tax and give detailed information on deferred tax assets and liabilities.

# Organisational improvements



To be able to deliver good services, NS is developing into a decisive and results-oriented organisation with effective leadership. We attach great value to operating in accordance with the agreed norms and values.

## Open and ethical culture

The conduct of NS's employees in their day-to-day activities and the choices they make in their work are crucial to the integrity of the company. NS has for several years been working on a targeted programme to create a strong culture of openness and accountability in which employees feel free to discuss dilemmas, weigh up risks, make well-informed choices and learn from mistakes. We use a method that ensures that staff make balanced choices and act consciously, with proper understanding and enthusiasm. Additionally, NS has introduced a system that helps to make integrity and compliance risks within the organisation visible and manageable. The aim of all this is to have lasting safeguards ensuring integrity, desired behaviour and compliance within NS.

## Striving for improvement

NS has the ambition to elevate integrity and compliance to a structurally higher level. We aspire to be a proactive organisation with an open and safe culture. To achieve that, we have to firmly anchor integrity and compliance within our operational management. In an effort to measure our progress in that regard, we performed maturity measurements of the integrity culture within NS on three occasions (in 2017, 2018 and 2019). These measurements show that NS has in recent years progressed to a more controlled approach of risks and issues surrounding integrity and compliance. Our knowledge and awareness of these topics have also increased across the entire organisation. Integrity and compliance issues that emerge from measurements, questions and reported cases are included in our decision-making and management processes in a more explicit manner. The aim is for this progress to continue and help us develop into a truly proactive organisation in the next few years.

## Core values and Code of Conduct

NS upholds the following core values: we are open and reliable, we go for results and we want to get ahead. These values are the foundation of what we do and what passengers can expect from us. NS also has a [Code of Conduct](#), which provides guidance for NS employees when they face choices and helps them make balanced decisions in a range of potentially tricky situations. The Code of Conduct satisfies the relevant OECD guidelines and is consistent with the Dutch Corporate Governance Code. We draw our employees' attention to the Code of Conduct and to the need for integrity in business practices by providing information and staging awareness sessions throughout the organisation. Furthermore, the NS Code of Conduct forms a basis for handling integrity reports and investigations.

## Integrity & Compliance governance

Primary responsibility for integrity in business practices and regulatory compliance rests with the first line of defence (the operational business). This means that the business itself should decide and coordinate integrity and compliance policies. Indeed, this chimes in with our conviction that integrity and compliance are part and parcel of our daily operational management. Several departments advise the business on how to integrate integrity and compliance in working practices: Legal Affairs, Risk, Finance, Procurement, HR, and Quality, Health, Safety & Environment. Each from within its own domain, these departments report on their efforts in areas such as safety, public procurement and financial accountability.

In addition, there is an Integrity & Compliance (I&C) department, which focuses on encouraging desired behaviour, regulatory compliance and observance of the NS Code of Conduct. This department develops policy, provides information on that policy, handles and investigates integrity violation reports, provides solicited and unsolicited advice, and promotes integrity awareness within NS. In addition, I&C monitors the development of business risks surrounding integrity and compliance and reports on those risks to the

Executive Board, the Risk and Audit Committee and the Supervisory Board. The department reports directly to the Executive Board, working closely with other departments including HR, Communications, Risk, Legal Affairs, Security and Audit. Consultations also take place (subject to the limits set by confidentiality) with the confidential advisers within NS and the 'Vangrail' network about developments, trends and signs regarding integrity violation reports and queries.

Additionally, NS has an Integrity Committee whose members include the directors of I&C, HR, Legal Affairs, Security and Risk and, depending on the topic, representatives of the business. The Integrity Committee is charged with testing new integrity and compliance policies and policy changes before their adoption by the Executive Board. It also handles major issues and violation reports in the area of integrity and compliance, and issues recommendations.

## Policy

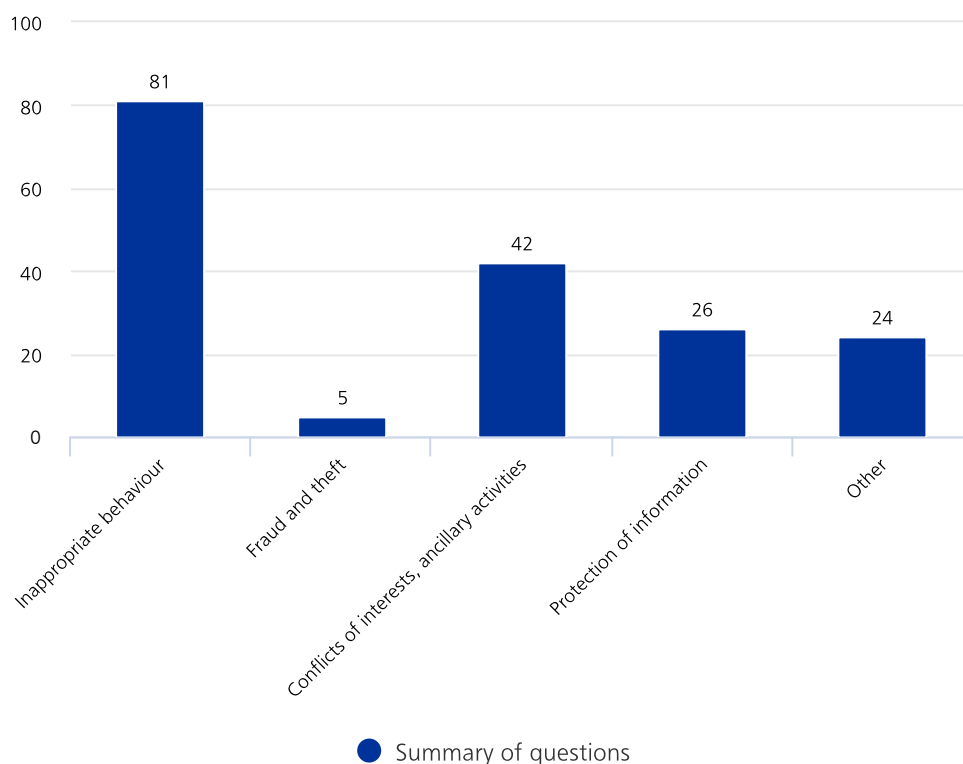
In line with its core values and Code of Conduct, NS has adopted policies on several specific themes, including conflicts of interests, desirable and undesirable behaviours, competition, protection of information, and fraud. As such, the business has guidelines in place on how to deal with issues in each of these fields. The policy documents concerned apply for NS as a whole, constituting the company's internal assessment framework for integrity-related queries, recommendations and reports. In addition, NS has a policy framework specifically aimed at helping managers deal with reported integrity violations. This policy framework is part of the Regulations for Reporting Integrity Issues, which also apply to whistle-blower reporting at NS.

## Information and advice

I&C works with the business to create an open culture in which employees feel free to express their views, hold each other to account and help each other make the right decisions. This cannot simply be imposed from the top down, but requires a truly joint effort. NS has opted for a practical approach that the people on the shop floor can identify with. I&C organises dilemma sessions for all parts of the organisation, from the Executive Board to teams in the various regions, in which teams are invited to discuss issues surrounding integrity, compliance and social conduct. The purpose of these sessions is to provide managers with practical tools for encouraging open and honest team dialogues, based on the 'train the trainer' principle, on any sort of dilemma that is relevant to the people at NS. In 2019, 495 of such dilemma sessions and dialogues were held.

In addition, employees receive regular information about current developments and issues, for example during the Integrity Week. We also use messages, posters and other information materials to draw our employees' attention to specific themes such as communication and behaviour, conflicts of interests or social conduct. On a monthly basis, we send themed bulletins with information on these issues to all employees who wish to receive them.

On the Integrity Portal on the intranet, employees can find a wealth of information about integrity and compliance-related issues. For instance, it includes a current overview of NS's integrity and compliance policies. Employees can also use the Integrity Portal to submit specific issues and dilemmas to I&C. Alternatively, they can ask questions by telephone or drop by in person. I&C will then advise them about possible solutions and measures. I&C helps people develop policies, place issues on the agenda and find relevant sources of information.



Category of questions	2019	2018
Inappropriate behaviour	81	32
Fraud and theft	5	0
Conflicts of interests, ancillary activities	42	62
Protection of information	26	21
Other	24	28
<b>Total</b>	<b>178</b>	<b>143</b>

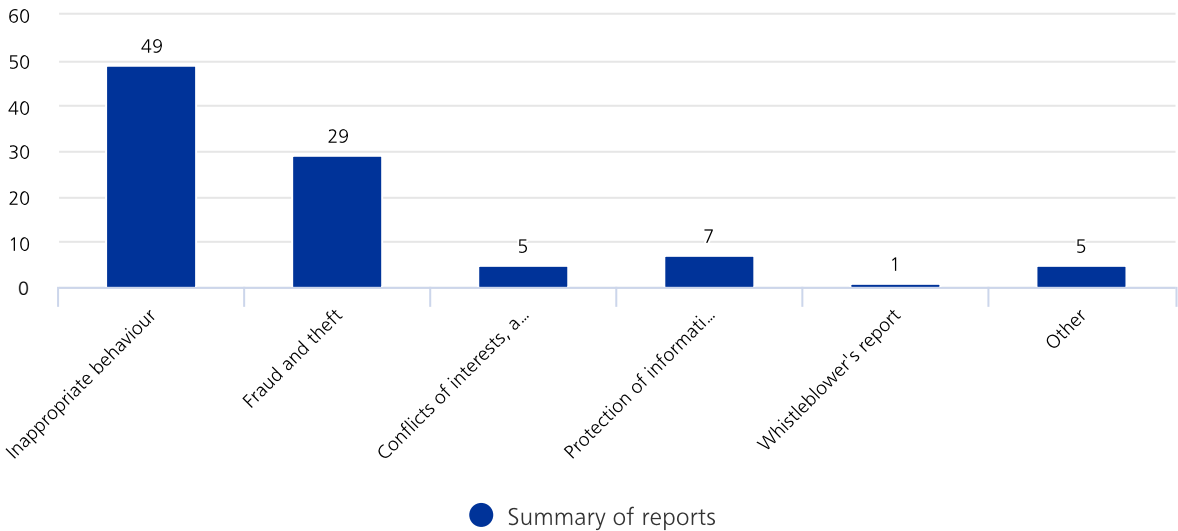
## Integrity Desk and Regulations for Reporting Integrity Issues

Staff have several options for (anonymously) reporting integrity issues or abuses: by email, by telephone, in a one-on-one conversation or via the Integrity Desk on the Integrity Portal. The Regulations for Reporting Integrity Issues (including 'whistle-blower' reporting) guarantee that employees can report actual or suspected irregularities, that these reports will be dealt with carefully and confidentially and that employees will not experience any adverse consequences of having reported an incident.

All reports are handled according to the NS Regulations For Reporting Integrity Issues. Each report results in a recommendation to the person who reported the issue and to the managers involved on any subsequent steps or measures. This may be followed by an investigation into the circumstances of the case, the aim of which is to establish the truth. Such investigations take place in accordance with the investigation protocol of the Regulations For Reporting Integrity Issues. An investigation may result in measures with regard to the organisation, processes and/or corporate culture. Disciplinary measures may be taken against employees involved, and relationships with suppliers or other partners may be reconsidered or indeed terminated. If there are suspicions of criminal misconduct, we may decide to hand over the case to the police and the judicial authorities.

Integrity investigations potentially have far-reaching consequences for the employees involved; they may apply for personal guidance through this process by an NS confidential adviser. Confidential advisers are independent and focus exclusively on the employee concerned. In 2019, a confidential advisor was consulted on 97 occasions.

Category of reports	2019	2018
Inappropriate behaviour	49	49
Fraud and theft	29	29
Conflicts of interests, ancillary activities	5	3
Protection of information	7	5
Whistleblower's report	1	0
Other	5	15
<b>Total</b>	<b>96</b>	<b>101</b>



And a total of 96 integrity violation reports were received. Of those reports, 12 were still being investigated by the end of the year. Of all finalised reports in 2019, 44% were found to be wholly or partially unfounded.

### Compliance

NS wants to comply systematically and permanently, demonstrably and credibly with the standards that are appropriate for a company of our social standing and responsibilities. We are aware that as a State-owned enterprise we serve as an example to other players, must be transparent on our regulatory compliance and act with integrity at all times. Integrity and compliance go hand in hand. We are keen to ensure that we comply with all the applicable laws and regulations and abide by the standards and values in force.

In these efforts, NS is bound to a compliance framework that governs compliance with external laws and regulations such as the Railways Act, the Competition Act, the main rail network franchise, NS's obligations under the collective labour agreement, and the Working Hours Act. In addition, we apply internal policy frameworks and guidelines such as our Code of Conduct, the procurement regulations and the train drivers' manual. NS has set up a compliance management structure in order to ensure that we keep abreast of this multitude of rules, standards and norms and are able to bring our social responsibility into practice. The legislator has imposed certain requirements that NS has to meet in its operations. These



requirements have been translated into practical performance indicators and process execution norms. NS applies compliance performance indicators in a range of fields, including competition, tendering, privacy and hiring external staff.

As compliance greatly depends on the conduct of our employees, there is also a direct correlation with integrity. NS believes it is extremely important for all employees to maintain an ethical attitude in their work, which will naturally promote compliance. In 2019, NS launched a nationwide Desired Behaviour Programme to take stock of - and where necessary improve - existing social behaviours on the shop floor. The NS Code of Conduct served as the guiding document for this programme.

NS invests in raising the knowledge of its employees on specific compliance themes. For example, in 2019 we ran a series of training programmes on competition and privacy. These programmes, which are continuing in 2020, comprise e-learning modules and tailor-made awareness sessions for specific groups of employees for whose work certain topics, such as new competition rules, are particularly relevant. Employees could also complete micro-learning modules on topics in the field of information security. By offering these training options, we enable our people to stay abreast of regulatory changes and current policies.

## Monitoring and adjustment

During 2019, the focus was on setting up an NS-wide monitoring and reporting structure for integrity and compliance issues. We created a dashboard for NS as a whole, covering the key risks and -issues regarding integrity and compliance, plus an overview of all relevant KPIs. The dashboard findings are reported to the Executive Board and to the Supervisory Board's Risk and Audit Committee as part of quarterly reporting within the NS planning and control cycle. This enables the NS management to make deliberate and balanced choices on integrity and compliance issues.

Given the scope of laws and regulations that NS must comply with, the reporting function is still in the process of development, particularly as regards compliance. We are gradually arriving at an integrated overview of all the relevant integrity and compliance issues and the associated key controls, and expect to complete that overview by the end of 2020.

## Leadership at NS

Leaders at NS operate in an organisation and context that are in a permanent state of flux. To help them drive the organisation forward and contribute to good results for the company, we are keen to assist them in developing their leadership skills. In 2019, we used the new profile for managerial roles as a blueprint for leadership development among our top 50 most senior managers. Most of them participated in a 360-degree reflection exercise and received both individual and team-based coaching. We also continued to pay as much attention as ever to promoting the current managers and preparing the managers of the future. We have already identified potential successors for staff in key positions for the short and long term, and we conduct a succession planning review three times a year. In doing so, we aim to increase diversity in our top 200 and succession planning strategy. Of the top 50 job vacancies at NS in 2019, 72% were filled by internal candidates.

## Leadership development

Employees who are able and willing to advance to managerial roles can count on us to provide tailor-made assistance and in-company leadership development programmes. For example, we concluded the CAP programme for a group of 17 prospective managers. Of these individuals, six took a follow-up step during the programme. Ninety percent of participants were able to achieve their personal development goals through the programme. A new group of 20 candidates has now started the tailor-made programme, defining the steps they need to take as managers. In 2019, a total of 31 new trainees took part in the trainee programmes for operational management, IT, and technology; an increase of 40% compared with 2018.

## Care for the privacy of our passengers and staff

For NS, the privacy of passengers and staff is more than just a mandatory regulation. We have defined four principles that take priority when processing personal data: 'Transparent', 'Safe with NS', 'Choice and control' and 'Innovative and open'. To safeguard compliance with privacy laws, NS has set up a privacy structure and privacy governance system and is devoting considerable attention to improving and securing processes.

Privacy training and awareness has our constant attention, as reflected in a range of compulsory e-learning modules, various training courses for teams of colleagues, an intranet page with extensive privacy-related information and frequently asked questions, and a periodic newsletter. In addition to pursuing initiatives to maximise awareness among our employees, we have appointed a number of 'privacy champions': employees who receive extra training and serve as the eyes and ears of the Privacy Office within their respective business units. Together with the Data Protection Officer and the Privacy Officers, these privacy champions make up the privacy function within NS. This enables us to maintain short lines of communication between the business units and the privacy experts and to ensure an extensive network for privacy-related knowledge within NS as a whole.

## Legal aftermath of the public transport tender in Limburg and the fine imposed by ACM

On 22 May 2017, following its conclusion that that NS had violated the Competition Act, the Netherlands Authority for Consumers and Markets (ACM) imposed a penalty on the company of €40,950,000. On 27 June 2019, the Court of Rotterdam upheld NS's appeal against that decision. This means that the penalty decision will be annulled. ACM has in turn appealed against the ruling of the court.

## Investigation by the Public Prosecution Service

The Public Prosecution Service (specifically, the Office for Financial, Economic and Environmental Offences in Den Bosch) started an investigation in 2015 into possible criminal acts in connection with the tendering process for public transport in Limburg. A writ of summons was issued for NS Groep NV. On 21 December 2017, the district court of Oost-Brabant acquitted NS of two of the offences with which NS had been charged and ruled that the Public Prosecution Service was not allowed to prosecute in the case of a third offence. This ruling was also made in the cases against the other parties involved, insofar as they had been charged with the same offences. The Public Prosecution Service has appealed against the ruling of 21 December 2017. It is not known at present when the Court of Appeal will hear the Public Prosecution Service's appeal.



# Statement by the Executive Board

The Executive Board believes that the risk management and internal control systems concerning the financial reporting risks in the year under review functioned satisfactorily and give a reasonable degree of assurance that the financial reports do not contain any material misstatements. The report gives sufficient insight, therefore, into the functioning of the said systems. The Executive Board states that as far as it is aware:

- the financial statements give a true and fair view of the assets, liabilities, financial position and profits of NS and the companies included in the consolidation as a whole;
- the annual report gives a true and fair view of the situation on the balance-sheet date and the course of business during the financial year;
- given the current state of affairs, the preparation of the financial reports on a going concern basis is justified;
- the annual report specifies the material risks and uncertainties that are relevant to expectations about the company's continuity for a period of twelve months after the compilation of the report.
- Note that the above does not mean that those systems and procedures provide absolute assurance as regards the achievement of operational and strategic objectives, nor that they will necessarily be sufficient to prevent any and all inaccuracies, errors and cases of fraud and failure to comply with laws and regulations. Neither will they be able to provide assurance that we will be able to reach our objectives. Given the above, the Executive Board is of the opinion that it satisfies the requirements of best practice provision 1.2 of the Dutch Corporate Governance Code.

# Dialogue with our stakeholders



In addition to daily contact with passengers, NS maintains close relations with many different stakeholders. Thanks to this dialogue, which is based on trust, we are able to jointly seize opportunities and accept or mitigate risks at an early stage. These talks also provide valuable expertise and ideas for our organisation and for better, more sustainable services for our passengers.

NS is a service-providing company that performs a social role at the very heart of society. There is a great deal of interest in our organisation among the general public and elsewhere – passengers, media, politicians and other stakeholders. The ongoing dialogue with our stakeholders is crucial for us.

## Our stakeholders

Our stakeholders are the people or groups who are affected by our actions and who, in turn, influence our organisation and services. NS is continuously monitoring who its stakeholders are. The nature of our contacts with stakeholders is determined in some cases by legislation (government ministries and regulatory authorities), in some cases by collaboration in the transport sector (carriers, ProRail) and in other cases by the public nature of our service (passengers, the media and interest groups). There can also be stakeholders who are on the scene temporarily for specific subjects – their input can be relevant and we take it seriously. We organise sessions with stakeholders on specific themes or promote a broad stakeholder dialogue on the course of NS. Such sessions were also held in 2019.

## Stakeholder management

Our main stakeholders are organisations representing passengers and consumers, ProRail, provincial authorities, municipal authorities, franchise authorities, the shareholder, our employees, trade unions, other carriers, politicians, employee participation bodies, suppliers, NGOs and interest groups within society. We involve them closely and (increasingly often) as early as possible when choices have to be made that affect passengers. We test ideas and listen to suggestions and criticism so that we can improve the course of the company, our services and our products. As a result, we pick up external signs early on that we can then use in our considerations and decisions. The dialogues with our stakeholders take place at various levels within the organisation, with the Executive Board often being involved. This enables us to build up trust.

## Working visits by stakeholders

In 2019 as in previous years, we organised a number of visits, both on request and on invitation, in which we informed stakeholders about our activities and let them experience all that goes on in our round-the-clock transport company. Members of the Lower House of Dutch Parliament visited new stations, for instance to see for themselves how the waste sorting and recycling processes work in practice. Political party representatives had a look behind the scenes at NS Opleidingen in Amersfoort and got a taste of the training programmes our Safety & Service teams complete to de-escalate aggressive behaviour in public transport. In March 2019, Minister for the Environment and Housing Van Veldhoven visited NS within the context of International Women's Day. On 8 October 2019, Finance Minister Hoekstra made a working visit to the new bicycle parking facility and Utrecht CS. Through these working visits, policy makers and politicians get to know our company in all its facets and increase their understanding of the various issues and solutions. That improves their ability to arrive at a balanced assessment of matters.

## Frequent consultation

### **ProRail, Ministry of Infrastructure and Water Management and LOCOV**

NS holds frequently consults with ProRail and the Ministry of Infrastructure and Water Management about topics such as joint projects, services and performance. In the national public transport users' forum LOCOV, NS consults with broadly represented passengers' and consumers' organisations. This statutory forum holds formal meetings and handles requests for advice on issues relevant to passengers.

We also organise informal themed sessions and working visits to provide information and consult the members. Recommendations made by consumer organisations represented in

LOCOV regularly result in us adjusting a decision. We consult participating organisations such as passengers' association ROVER, Ieder(in), the Dutch Cyclists' Union, the KBO union of senior citizens' organisations and ANWB (the Dutch automobile association) on topics that have a longer-term impact, such as the purchase of new rolling stock, changes to the timetable, accessibility and withdrawals from service.

In 2019, NS and the consumer organisations held extensive discussions about modifications to the range of season tickets available at NS. They also discussed adaptations to the timetable in the event of adverse weather conditions. In response to an investigation requested by ROVER, more flexibility is ensured in the implementation of regional adaptations to the timetable. Another important point for discussion within LOCOV were the works conducted in Leiden. After completion of those works, we sat down with the consumer organisations to review the process and share the lessons learned.

NS and ProRail organised station visits, as in previous years, which help us see our stations through the eyes of the passenger. We look at the concourse, the platforms and the journey information. Every visit reveals valuable points for attention, for example concerning the ideal location for journey information or tactile guidance lines.

### **Collaboration in the transport sector**

We work with partners in the transport sector, such as other carriers and ProRail, to ensure the optimum journey for our passengers from door to door. That collaboration features prominently at all levels of our organisation, in terms of strategy as well as operations, and with an eye on the long-term vision that we drew up in the Mobility Alliance with a view to improving and optimising mobility within the Netherlands. Our intensive collaboration with sector partners is also improving customer satisfaction thanks to better operational statistics for aspects such as punctuality and the quality of connections, and to improvements in the journey to and from the station.

An important theme during 2018 and 2019 was the development of our strategy for the period up to 2025: 'Keeping the Netherlands accessible in a sustainable manner - for everyone.' In that strategy, we stress the relevance of collaboration. The process of developing the strategy involved us talking in 2018 and 2019 with over 70 external stakeholders about NS's role in the future of mobility in the Netherlands. This also covers our collaboration with KLM, and opportunities to use international trains rather than aeroplanes for relatively short distances. This concerns, for example, the routes to Berlin, London and Brussels.

### **Mobility Alliance**

NS, ANWB, RAI (the association for manufacturers and importers of vehicles), Transport and Logistics Netherlands and other parties in the mobility sector have joined forces since 2016 in the Mobility Alliance, which aims to keep the Netherlands moving. This permanent collaboration was prompted by a shared sense of urgency because the Netherlands is becoming overly congested, as well as by a realisation that there are opportunities to make mobility in the Netherlands cleaner, smarter and safer. The Mobility Alliance now includes 25 bicycle, car, transport, public transport and business passenger organisations and its original vision has been formulated in more detail. In June 2019, the alliance presented the Mobility Delta Plan to Minister for the Environment and Housing Van Veldhoven and Minister of Infrastructure and Water Management Van Nieuwenhuizen. The plan, which addresses mobility in an integrated fashion, presents solution strategies that will help to keep the Netherlands accessible over the period up to 2030, despite continuing growth in road traffic and public transport. It also includes an investment agenda in support of this effort. One crucial element in the Mobility Delta Plan is freedom of choice and flexibility in travel behaviour, which is being tested in pilots with 'paying for usage' systems.

## Vision for the future of public transport up to 2040

If congestion in the Netherlands is to remain manageable, ProRail, passengers' organisations and other stakeholders will have to continue their mutual dialogue. This is why NS also took part this year in elaborating the 'Toekomstbeeld OV 2040' (Vision for the Future of Public Transport up to 2040). In 2019, the participants jointly finalised the contours of this vision and started formulating the details of its implementation. NS is making a major contribution to the details of the network and hubs, and is discussing potential solutions and dilemmas in this regard from a regional, national and international perspective. As regards 2020, it is important for us to jointly formulate a development agenda that includes decision-making details for investments in the Multi-annual Programme for Infrastructure, Space and Transport (MIRT) and the Mobility Fund (which has succeeded the Infrastructure Fund).

## A focus on regions

NS serves all parts of the Netherlands: both densely populated and sparsely populated areas, the Randstad conurbation and rural regions, and all twelve provinces. Following the provincial elections in 2019, our contacts with mobility and spatial policy administrators in the provincial executives have focused on getting to know one another and sharing plans and wishes. The actual talks are about the development of the timetable and the railway / public transport infrastructure, and about the role of the railways in accessibility and mobility issues. Other topics that attract a great deal of attention and interest are hub development, the funding of public transport, international railway connections and a better spread of passengers during peak times. Administrators are facing huge tasks and complex challenges, not least the nitrogen crisis, and are aware of NS's capacity to contribute to solving these issues. Hence, NS is keen to intensify its collaboration with provincial and regional authorities through the joint development of plans and implementation of measures.

### Less crowding at peak times following adaptation of lecture times

In order to ensure sustainable accessibility for the Heyendaal campus of Nijmegen's Radboud University and eventually giving it zero-CO2 emission status, the 'Sustainable Accessibility for Heyendaal' project group was established in 2016. Its members include Radboud University Nijmegen, HAN University of Applied Sciences, the Nijmegen Regional Training Centre, Radboudumc, ARRIVA, NS, Connexion, the municipality of Nijmegen, the province of Gelderland, the Ministry of Infrastructure and Water Management and student union AKKU. Besides the project group there is an advisory board for consultation with members of the provincial executive, aldermen and the executive boards of the institutions and public transport companies involved.

To reduce crowding during the morning peak hour, in 2018 HAN University of Applied Sciences and Radboud University changed the start of their morning lectures by 15 minutes: at Radboud University lectures now start 15 minutes earlier, at 8.30, while at HAN University of Applied Sciences they start 15 minutes later, at 9.00. Lessons at the Nijmegen Regional Training Centre start at 8.30 as before. These arrangements have caused traffic to spread more evenly, levelling off traffic intensity at peak times and improving the flow of traffic. The results of the changes were published in 2019, with the number of rail passengers at 8.15 shown to have decreased by an average 22%. Buses saw the number of passengers at the peak moment fall by 10%. The figures also show that the reduction of student numbers at peak times is permanent, and that road and railway traffic has come to be more evenly spread. As such, the measure has a highly favourable effect on the flows in various different modes of travel.

## Dilemmas in the discussions

NS shares the dilemmas it is facing with stakeholders in good time, so that they have a better understanding of policy considerations and joint solutions can be found. We provide our stakeholders with a steady stream of feedback about their ideas and recommendations and the effect that the dialogue has had on NS policy, both in regular discussions and thematic sessions and in reports. Examples include adaptations to our product portfolio or in compiling new timetables. The aim is that passengers overall should benefit from this, although there will inevitably be passengers for whom any given choice has an adverse effect. We talk to consumer organisations about these dilemmas.

### LOCOV case: season ticket update

One such dilemma was associated with our plans to adapt the range of season tickets that we offer. NS Flex is to become the standard for most season tickets, and the number of different types of season tickets will be halved, from 22 to 11. To increase seat availability on our trains at peak times, NS has decided to terminate the 40% discount for passengers during the afternoon peak with effect from 2021. This decision was the result of an intensive process of discussions with the consumer organisations united in LOCOV, which included an official advisory procedure. The consumer organisations advised us to change our plans in quite a few respects. NS then faced a dilemma: we wanted to simplify the range of season tickets on offer, but we also wanted to listen carefully to the advice we received from the consumer organisations. In the end, that made us decide to withdraw or modify part of our original proposals.

- NS decided that customers with a Dal Voordeel season ticket and the Voordeelurenabonnement (without the afternoon peak discount in future) should continue travelling with Pre-Paid Travel. As a result, 1.5 million customers will not automatically transfer to NS Flex compared with the original request for advice, but will be able to continue Pre-Paid Travel using their existing season tickets (with only the terms and conditions being amended).
- The consumer organisations also advised us to allow passengers to buy more travel days than we had proposed, and to retain the option of a paper version. In response to this advice, NS decided to retain the Keuzedagen for our existing customers who have this option. This means both that the paper version will be retained and that our existing customers retain their existing annual number of elective days (no longer during the afternoon peak though). NS does intend however to simplify the Keuzedagen, which is why they can now be used throughout the year.
- NS has also changed a number of prices, which includes a lower price for NS Flex.

### Case: Noord-Holland timetable

Due to the concentration of people who work in Amsterdam and live in the provinces, the transport market in the province of Noord-Holland has a strong focus on Amsterdam and very high peak hour volumes. Trains in that area are crowded during peak hours and quiet outside peak hours. In addition, following the introduction of the ultra-high frequency train between Amsterdam and Alkmaar, train-bus transfer times in Hoorn and Beverwijk and for the ferry to Texel have become too long. At the end of 2018, as part of its plans to optimise the timetable in 2022, NS engaged in a dialogue with regional municipalities and the province of Noord-Holland so as to improve the timetable and increase train usage. What is characteristic of this process is that we set out designing our new timetable on the basis of an analysis of the interests and standpoints involved and that we gathered feedback from the region through multiple administrative work sessions and one meeting with administrators. During the work sessions we also shared data with players in the region to make sure that the consultation would be taking place among equal parties. The process will be finalised in April 2020.

## Case: ERTMS

ERTMS stands for the European Rail Traffic Management System, which is a new rail safety system. The European Commission has selected ERTMS to replace all the current systems and drive innovation on the track through digitalisation. The implementation of ERTMS in the Netherlands is being prepared in a partnership between the Ministry of Infrastructure and Water Management, NS, other carriers and ProRail. ERTMS offers opportunities for NS and for our passengers. The railways will become safer, allow faster trains and accommodate more trains; passenger information will always be up to date and it will be easier for international trains to travel in other countries. As part of this programme, NS is facing the challenge of:

- converting 504 train sets to ERTMS;
- upgrading 197 train sets to a more recent ERTMS version;
- equipping new rolling stock series such as SNG and (in future) ICNG with ERTMS;
- preparing maintenance centres for the maintenance of rolling stock fitted with ERTMS;
- training 3,000 train drivers;
- adapting ICT systems.

What is more, NS will have to tackle these challenges with as little inconvenience for passengers as possible. ProRail aims to have installed ERTMS on the busiest routes by 2030. The Betuwe Line, the Hanse Line and the Amsterdam-Utrecht route have already been equipped with ERTMS, and NS is also already using it on HSL South.

### **Socially relevant case: passengers with dementia in public transport**

In the years ahead, both NS employees and passengers will be increasingly confronted with passengers who suffer from dementia. Due to the ageing population, the number of people with dementia will rise from 280,000 today to nearly half a million by 2040. Of all people with dementia, 70% are living at home and still enjoy a day out. However, they experience all sorts of practical problems in the public transport system, such as checking in using the OV-chipkaart, using the check-in and check-out gates at the station or finding the right platform.

NS and the 'Samen dementievriendelijk' ('Joining forces for a dementia-friendly society') programme, an initiative launched by Alzheimer Nederland, PGGM and the Ministry of Health, Welfare and Sport as part of the Dementia Delta Plan, have tried to find a way of focusing attention on passengers with dementia in public transport. The initiative developed into a public campaign combined with an online training programme for passengers and employees. The training programme for employees incorporates real-life situations in the train and at the station, suggested and presented by colleagues. By learning to recognise signs of dementia, NS employees can help people with dementia find their way in public transport in a few simple steps, so that these passengers can continue their journey free from stress.

*Gerjoke Wilmink, director of Alzheimer Nederland: 'We have joined NS in an effort to make travelling by train a bit easier for people with dementia. After all, for these people life is difficult enough as it is. NS is a wonderful example for other organisations whose customers may have dementia. In this way we can make all sectors of society more dementia-friendly and allow people with dementia to remain socially active for as long as possible.'*

## Consultations with the trade unions

NS attaches great importance to good relations with the trade unions. In 2019, the discussions mainly concerned implementation of the agreements in the 2017-2020 collective labour agreement and the resulting HR policy. For example, NS and the unions discussed the implementation of the social plan, sickness absence and sustainable employment.



## Dialogues with the stakeholders

In addition to our regular contacts with stakeholders about day-to-day matters, we are also keen to talk to them about opportunities, threats and trends in the medium term. That is why NS organises national-level meetings with a wide range of stakeholders about our social role and on specific themes where we have an impact. These are themes that concern our stakeholders or NS itself. This allows us to facilitate dialogue not only between NS and its stakeholders, but also among the stakeholders themselves. This regularly leads to a better understanding of our mutual interests and produces valuable constructive criticism and ideas for NS.

### The future for NS

In May 2019, NS organised a central stakeholder dialogue session with 60 organisations that NS has contacts with. The idea was to share thoughts about 'The future is now'. Consumer organisations, regional authorities, ProRail and trade unions attended this event, along with other organisations. The Executive Board engaged in discussion with those present about the trends and developments that are relevant to the future of mobility in the Netherlands. These include regional collaboration, the future of the stations and the role of NS in new technologies and innovation. A shared vision emerged of the challenge facing us all of maintaining accessibility and quality of life in the Netherlands.

### Academic publication and series of seminars on 'On Track for the Future'

The agenda for the years ahead includes various policy developments, such as the Vision for the Future of Public Transport, the Long-Term Rail Agenda, the implementation of the Fourth EU Railway Package and choices in market regulation. There are also independent developments that will affect mobility in the future. That is why GVB, HTM, NS, ProRail and RET have taken the initiative for a series of academic seminars and publications. The aim of this is to mobilise the best scientific knowledge and practical experience available internationally for the benefit of policy in the Netherlands. This initiative is expected to add value not so much through the policy conclusions themselves as through the underlying analyses and considerations. Professors Bert van Wee (Delft University of Technology) and Maarten Jansen (Vienna University) are responsible for the content and the independence of the contributions. In 2019, the last from a previous series of ten in-depth seminars were held. The papers were compiled into an ESB file and presented at the concluding event on 11 October 2019. They have also been made available to the general public online.

## Stakeholder dialogue diagram

The table below summarises the wide range of dialogues between NS and its stakeholders. The numbering refers to the themes from the material relevance matrix.



European	Nature of dialogue	Content of dialogue	Effects of the dialogue on NS policy
<b>EU institutions, CER, UIC, ERA</b>	Informational, creation and to determine standpoints	15 Implementation of the Fourth EU Railway Package, enhancing interoperability, ERTMS, accessibility, improving the passenger's position, promoting sustainable mobility, encouraging better and faster train connections between major urban centres in Europe (for distances of up to around 700 km).	<ul style="list-style-type: none"> <li>• Strengthening the position of domestic and international passengers and supporting NS's position as the key rail passenger carrier in the Netherlands</li> <li>• Optimising cooperation between European railway companies and institutions</li> <li>• Sustainable investments in the railway sector that contribute to climate objectives</li> <li>• NS's reputation as a sustainable partner</li> </ul>
<b>National (NL)</b>	<b>Nature of dialogue</b>	<b>Content of dialogue</b>	<b>Effects of the dialogue on NS policy</b>
<b>Customers (consumers and businesses)</b>	Informational, creation, monitoring	2, 3, 6, 11  Timetable, public transport card (OV-chipkaart), customer satisfaction, handling complaints and inquiries, consumer portfolio, corporate portfolio, collaboration with bus, tram and metro companies, accessibility	<p>Improved services, including:</p> <ul style="list-style-type: none"> <li>• NS Flex goes live Over 55,000 customers have discovered the benefits of our 'travel now, pay later' option</li> <li>• 40% discount on the IC Direct surcharge in off-peak hours to persuade customers to travel at quieter times of the day rather than in crowded trains</li> <li>• Collaboration between Mecanoo, Gispen and NS on vision for train interiors in the future and involving interest groups in this</li> <li>• Following consultation with Eye Association Netherlands (Oogvereniging), passengers with a visual handicap can now also participate in the trial on reporting nuisance in the train via an app or sms text messaging</li> <li>• As part of the upgrade of the ticket machines, a first step was taken at the request of Eye Association Netherlands to introduce audio feedback via a speaker or headphones</li> <li>• First success in changing lecture times in Nijmegen to spread students' travel in peak times. Talks are ongoing with various cities</li> <li>• NS ZitplaatsZoeker App (seat searcher) is being rolled out for various types of train. It shows where most free seats are in each carriage</li> <li>• The discount for passengers travelling together has become even easier to obtain. This is also available as an e-ticket as of November</li> <li>• 7,800 new public transport bicycles added in autumn 2019. Increase of more than 24% in number of trips compared with 2017</li> <li>• GoAbout and Booking.com have started pilots for the sale of train tickets. This makes it even easier to introduce new groups of passengers to public transport</li> </ul>
<b>Shareholder Ministry of Finance</b>	Intensive involvement	1, 2, 7, 13, 14, 15  Performance of NS, remuneration, strategy, appointments, major investments, benchmark return from State participations	<ul style="list-style-type: none"> <li>• Determining financial policy and Executive Board remuneration</li> <li>• Transparent reporting as per GRI</li> <li>• Progress of GRC measures and savings through efficiency measures</li> <li>• Progress of 'Spoorslags Beter' ('On track for improvement') strategy and consultation in adoption of new strategy by Supervisory Board</li> <li>• Risk framework for foreign operations</li> </ul>
<b>Ministry of Infrastructure and Water Management</b>	Intensive involvement	1, 2, 3, 4, 5, 8, 9, 10, 11, 12  Performance of NS, main rail network franchise, reliability, transport capacity, door-to-door journey, HSL South train services, personal safety and railway safety, public transport card (OV-chipkaart), accessibility, timetable, transparency, sustainability	<p>Including:</p> <ul style="list-style-type: none"> <li>• 2019 Transport Plan</li> <li>• Timetable in 2020 and 2021</li> <li>• Midterm Review: evaluation of 2014-2019 performance and financial balance, updating the franchise for 2020-2025</li> <li>• Market regulation studies, e.g. into decentralisation, open access and the position of stations</li> <li>• Conversion of ProRail into autonomous administrative authority</li> <li>• Transparency: dashboard performance</li> <li>• International train services: introduction of direct Eurostar and night train to Vienna</li> <li>• Water fountains at various stations</li> <li>• Outline of vision of the future of public transport</li> <li>• Increase in service frequency for Zandvoort for Formula 1</li> <li>• Airport Sprinter</li> <li>• Steps towards new payment methods (also in NOVB context)</li> </ul>

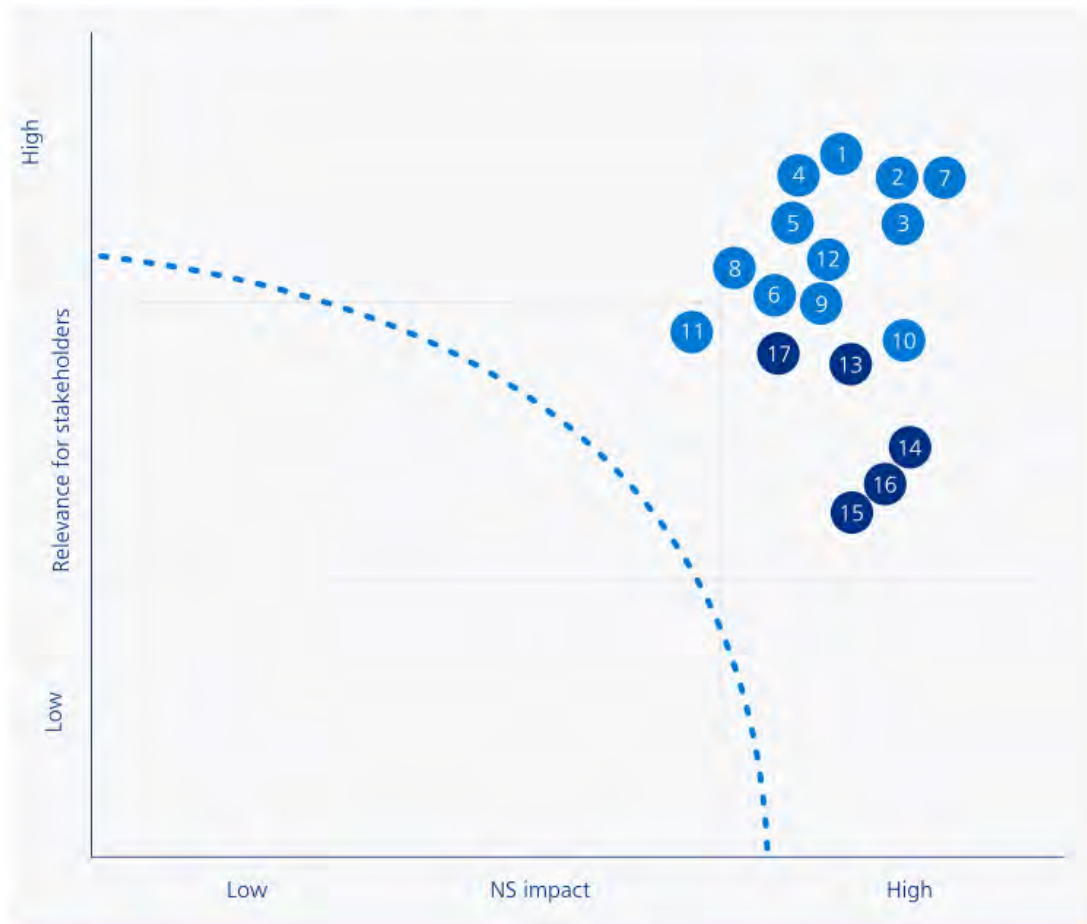
<b>National political bodies</b>	Informational, intensive involvement	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16 NS strategy, operational performance, sustainability, circular economy, new rolling stock, ERTMS, main rail network franchise including HSL, international train connections, public transport card (OV-chipkaart)/access gates, diversity policy, personal/railway safety, timetable, coping with winter and seasonal conditions, service at stations, suicide prevention	Including: <ul style="list-style-type: none"> <li>• Connections to and from different parts of the country and acceleration of (among others) connection from northern Netherlands to Randstad conurbation</li> <li>• Investigation into speeding up and extending international connections</li> <li>• Dialogue on avoiding peak times for measures to alleviate the main peak</li> <li>• Programme for Accessible Travel by Train</li> <li>• Transparency and level playing field, including at stations</li> <li>• Package of measures for personal safety, pilot project using text messages + app for reporting incidents in trains</li> </ul>
<b>Supervisory authorities – Netherlands Authority for Consumers &amp; Markets (ACM), Human Environment and Transport Inspectorate (ILT), Dutch Data Protection Authority</b>	Involvement, consultation ('guidance') and information	1, 2, 4, 7, 9, 10, 11, 12, 13 Responding to regular and ad hoc requests for information. Discussing topical subjects such as achieving a more professional safety culture, market issues, acceptance of rolling stock, safety incidents, incident investigations, clarification of new regulatory requirements and providing input for market studies and consultations.	<ul style="list-style-type: none"> <li>• Improved implementation and service</li> <li>• Promoting compliance</li> <li>• Transparency</li> <li>• Position statements</li> <li>• Increasing safety on the track, both for NS and throughout the sector</li> </ul>
<b>ProRail</b>	Intensive involvement	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 Long-Term Rail Agenda, timetable development, performance of the rail system, availability of infrastructure, safety, accessibility, station development, ERTMS, sustainability	Including: <ul style="list-style-type: none"> <li>• Realisation of Better &amp; More</li> <li>• Cooperation on seasonal measures</li> <li>• Cooperation on safety, safety policy and accessibility</li> <li>• Cooperation with regard to stations (management, maintenance, development and new construction)</li> <li>• Better alignment between infrastructure and the timetable [via the MLT Steering Group]</li> <li>• Cooperation with regard to sustainable development and placing it on the political agenda</li> </ul>
<b>LOCOV (National Public Transport Users' Forum)</b>	Intensive involvement	2, 3, 6, 7, 8, 9, 10, 11, 12 NS timetable, fares, travel information, public transport card (OV-chipkaart), service delivered to passengers, Transport Plan, customer satisfaction, punctuality, new rolling stock, withdrawals from service, accessibility, international connections, HSL services, NS strategy.	Including: <ul style="list-style-type: none"> <li>• A better train product by processing timetable suggestions made by consumer organisations</li> <li>• Clearer general conditions for refunds for delays</li> <li>• Improvements in Group Return product (implemented in 2018)</li> <li>• Improvements in the proposal to introduce travel assistance by 2025 at all stations on the main rail network called at by NS, that have been made accessible by ProRail and where transfer safety considerations on the platform allow this</li> <li>• No differences between NS Flex and Pre-Paid Travel in first-class fares, following advice by consumer organisations (decision of October 2018, implemented in 2019)</li> </ul>
<b>Interest groups, NGOs, Anders Reizen (employers' coalition) and political bodies</b>	Involvement, consulting and information	1, 2, 3, 4, 5, 6, 9, 11, 16 Encouraging sustainable mobility (via employers), public transport contribution to the Climate Agreement, role of NS in generation of energy, positioning of NS with regard to onshore solar farms, making replacement bus service climate neutral, social policy, promoting accessible train travel for people with impairments	Including: <ul style="list-style-type: none"> <li>• NS is increasing the sustainability of its mobility policy by, as from 1 January 2018, only facilitating 100% electric person-related lease cars, and by offering a scheme to encourage employees to use electric or regular bicycles to come to work</li> <li>• NS contributes to implementing the mobility measures in the Climate Agreement</li> <li>• NS contributes to the energy transition by making its assets available for generating energy</li> <li>• NS endorses the recommendations in the code of conduct for onshore solar farms aimed at limiting the spatial impact of such solar farms as much as possible</li> <li>• NS implemented climate-neutral replacement bus services in 2019, and in the lead-up to this checked the proposed approach with NGOs and incorporated their recommendations</li> <li>• In various invitations to tender, NS has included SROI obligations for suppliers to engage people who are at a distance the labour market</li> <li>• At five stations, NS is introducing the 'one-more-step service' to guide people with a visual impairment in a complex NS station to connecting public transport, a taxi or the pick-up/drop-off location</li> <li>• NS is expanding the number of stations where assistance is offered</li> <li>• NS is organising an awareness campaign to teach staff and passengers appropriate ways to help people suffering from dementia in public transport</li> </ul>
<b>Trade unions</b>	Intensive involvement	4, 12, 16	<ul style="list-style-type: none"> <li>• Implementation of the 2017-2020 collective labour agreements and resulting HR policy</li> </ul>

		Collective labour agreement, personal safety, pension plan, social plan, personal and social consequences of organisational changes, signs suggesting satisfaction or dissatisfaction among staff, employees' interests, long-term NS strategy	<ul style="list-style-type: none"> <li>• Implementation of the Social Plan</li> <li>• Implementation of the pension plan</li> <li>• Implementation and evaluation of a package of measures for personal safety and the implementation decree</li> </ul>
<b>Suppliers, subcontractors</b>	Consulting and making acquaintance, negotiating conditions, making contractual agreements, intensifying collaboration, innovation and development	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16  Sustainability, specifying, transparency, financial position, integrity, innovation, reliability, risk management, collaboration, intensification	<ul style="list-style-type: none"> <li>• Achievement of CSR objectives (by making the entire supply chain more sustainable)</li> <li>• Introduction of new products and services</li> <li>• Focus on more value creation for NS</li> <li>• Focus on reliability and availability of products and services for business-critical processes</li> <li>• More attention for compliance with regulatory requirements</li> <li>• Agreeing on mutual expectations with suppliers</li> <li>• Introducing new suppliers</li> <li>• Encouraging cooperation and innovation with partners</li> </ul>
<b>Media</b>	Informational, intensive involvement	All NS-related subjects	<ul style="list-style-type: none"> <li>• Position statements</li> <li>• Improving NS image in line with operational performance</li> </ul>
<b>Regional authorities and official representatives of the provinces, metropolitan regions and municipalities, other carriers and consumer organisations</b>	Informational, negotiations, contractual agreements, crisis management, collaboration, exploring and investigating	1, 2, 3, 4, 6, 7, 8, 9, 10, 12  Quality of train services, crowded trains, punctuality, network development, redevelopment of existing stations, public transport and railway discussion platforms, advisory body on the Multi-annual Programme for Infrastructure Space and Transport for the northwest Netherlands (BO MIRT NWNL), vision of the future of public transport and the public transport development agenda, national environmental strategy, timetable, cross-border transport, access gates, personal/railway safety, transport sector-wide agreements, regional franchises, noise nuisance near the railways, hub development	<ul style="list-style-type: none"> <li>• New, more modern stations and redevelopment of station surroundings</li> <li>• New agreements on night trains and an early-morning train between Almere and Schiphol</li> <li>• Agreement about the installation and accelerated roll-out of access gates</li> <li>• Tailored regional solutions for replacement bus service when train services are interrupted</li> <li>• Joint public transport development agendas for attractive stations and better accessibility from door to door</li> <li>• Customisation in the main rail network timetable and improved connections to regional public transport</li> <li>• Investment by public authorities in Haarlem-Zandvoort line to enable NS to deploy additional trains in the summer and for events</li> <li>• Feasibility study for high-frequency Sprinter service on the Amsterdam western route, Airport Sprinter and Sprinter frequency for the province of Noord-Brabant</li> <li>• MIRT multimodal hub at Schiphol on the investment agenda in conjunction with investments in Greater Amsterdam</li> <li>• Various bicycle storage facilities free of charge for the first 24 hours, extension of P+R sites</li> <li>• Formulating regional goals for the vision of the future for public transport</li> <li>• Eindhoven International Hub XL</li> <li>• Door-to-door journey (incl. MaaS projects)</li> <li>• Optimising the Noord-Holland North timetable</li> </ul>
<b>Internal: central and local works councils, vocational training</b>		See Attractive and inclusive employer	

## Our materially relevant themes

NS bases its policy priorities on material relevance, weighing up the interests of our stakeholders and the actual impact that NS can have on the topic. We draw up a material relevance matrix based on the various dialogue sessions held in 2019, the ongoing alignment with stakeholders and the biennial survey we ask them to complete. This shows which themes our key stakeholders currently deem most important, what priorities they assign to them and what impact NS has on these themes.

## Material relevance matrix for 2019



- |  |                          |
|--|--------------------------|
| 1 Reliability  | 13 Risk management       |
| 2 Transparency   | 14 Financial performance |
| 3 Prioritising 'passengers, passengers and passengers' / customer satisfaction | 15 Operations in Europe  |
| 4 Collaboration (internal and external)  | 16 Attractive employer   |
| 5 Sustainability   | 17 Regional activities   |
| 6 Seamless door-to-door travel   |                          |
| 7 Integrity  |                          |
| 8 Punctuality  |                          |
| 9 Accessibility  |                          |
| 10 (Facilities at the) stations  |                          |
| 11 Personal safety   |                          |
| 12 Innovation  |                          |

## Material relevance matrix for 2019

NS assessed the material themes for 2019 to check that they were as topical and valid as in 2018. The position of the themes was confirmed in additional checks, in the form of continuous monitoring, a media and Internet analysis and regular meetings with stakeholders. Furthermore, internal sector experts looked at developments within the public transport sector. The matrix for 2019 was then presented to the Executive Board and finalised. Like last year, the themes are clustered together in the matrix: they are positioned close to one another, with an overall high level of importance and high impact for NS. This is because of NS's broad mandate in society, the considerable impact NS has on many issues due to its monopoly of the main rail network, and the balance between NS's social and commercial roles. The most materially relevant themes are the numbers 1 through 12. One theme has been added: regional activities. Some other themes have seen a slight shift in terms of importance and impact.

According to the stakeholders, the importance of NS as an *attractive employer* (16) has considerably increased; we are also seeing an increase of NS's impact on this theme. This can be related to increasing labour market shortages on the one hand, and to our efforts to attract technical and ICT staff and highlight diversity and inclusion on the other. This was also reflected in the fact that NS climbed in the attractive employer rankings of Intelligence Group and Intermediair Imago Onderzoek. For three themes, *Collaboration* (4), *Seamless door-to-door journeys* (6) and *Innovation* (11), there was an increase both in terms of importance and impact. Our efforts on these themes are closely interconnected. The activities of the Mobility Alliance (launch of Delta Plan), participation in the Climate Platform, contribution to the Vision for the Future of Public Transport, foundation of RIVIER in conjunction with the G4 for the MaaS platform, new functionality for the NS-App (seat searcher and access to shared car and public transport bicycle options via the app), launch of ATO pilot and continued collaboration with educational institutions to reduce crowding at peak hours. *Activities in Europe* (15) has increased both in terms of importance to stakeholders and impact of NS, which can be attributed in part to the realisation of the direct connection between Amsterdam and London, the announced night train service to Vienna and the membership of Roger van Boxtel of CER (the Community of European Railway and Infrastructure Companies) in Brussels.

## Definitions of the materially relevant themes

1. **Reliability:** the extent to which stakeholders trust NS to fulfil its promises to customers and other stakeholders
2. **Transparency:** the extent to which NS is open about its affairs
3. **Passengers, passengers and passengers/customer satisfaction:** the extent to which NS strives for high levels of customer satisfaction
4. **Collaboration (internal and external):** the extent to which senior management aims for collaboration (both within NS and beyond) and puts collaboration with partners in the transport sector into practice
5. **Sustainability: the extent to which NS makes efforts to ensure the balance between** people, planet and profit in its operational management
6. **Seamless door-to-door journeys:** the extent to which NS works on enabling smooth door-to-door journeys
7. **Integrity:** the extent to which NS is honest and ethical

8. **Punctuality:** the extent to which NS works on delivering travel in accordance with the timetable
9. **Accessibility:** the way in which NS makes its services available and accessible for everybody
10. **Stations and facilities at stations:** the extent to which NS works on making time spent at stations a pleasant experience thanks to various facilities
11. **Personal safety and railway safety:** the extent to which NS works on providing a safe journey on trains and at stations
12. **Innovation:** the extent to which NS keys into trends and developments with its products and services
13. **Risk management:** the extent to which NS is able to identify risks and take appropriate measures in good time
14. **Financial position:** the extent to which NS is able to meet its financial obligations, both now and in the future
15. **Operations in Europe:** the extent to which NS learns from its operations abroad
16. **An attractive and caring employer:** the extent to which NS succeeds in offering its employees attractive employment terms, an attractive remuneration policy and career development opportunities
17. **Regional activities:** the extent to which NS succeeds in offering tailored regional solutions

## Strategy and materially relevant themes diagram

Strategic priorities		Indicators with a quantitative target value	Objectives	Results	Risk factors	Result/prospects
Themes	Material topics	KPI	Objective in 2019	Achieved in 2019	Risks	Social impact/SDG
<b>An attractive physical offering</b>	Punctuality/reliability/cooperation	Punctuality			Market regulation, infrastructure capacity, reliability of IT,	Journey time, SDGs 11, 13, 17
		% passenger punctuality to 5 min. on main rail network	88.9%	92.6%		
	Travelling without barriers	Quality of connections to other carriers	94.0%	96.0%		
	Accessibility/reliability/travelling without barriers/cooperation	Accessibility				Journey time
		Seat availability at peak times	94.3%	94.9%		
Seat availability at peak times on focus routes	4.9%	2.1%				
<b>Optimising the customer experience</b>	Prioritising passengers, passengers and passengers/customer satisfaction/travelling without barriers/cooperation	Customer experience			Market regulation	Mobility, SDG 11
		General customer satisfaction	74%	89%		
	Safety (including personal safety)/cooperation	Personal safety			Safety	Personal safety
		Passengers' perception of safety	81%	90%		
Reputation (RepTrak)	60 in 2020	65.9				
<b>Performance of HSL South</b>	Prioritising passengers, passengers and passengers/customer satisfaction/cooperation	Customer experience			HSL service	Mobility, SDGs 11, 17
		Overall customer satisfaction with HSL South	68%	87%		
	Punctuality/reliability	Punctuality			HSL service	Journey time

		% passenger punctuality on HSL South	82.1%	83.4%	
	Accessibility/reliability	Accessibility			HSL service
		Seat availability on HSL South	91.2%	97.1%	
<b>Perfect execution</b>	Prioritising passengers, passengers and passengers/customer satisfaction/cooperation	Punctuality			Market regulation, infrastructure capacity, reliability of IT, journey time, SDGs 9, 11, 13, 17
		% passenger punctuality to 15 min. on main rail network	96.7%	97.7%	
	Travelling without barriers	Journey information			IT reliability
		Information about delays	75.0%	84.5%	Journey time
		Travel information in the chain	81.4%	85.3%	
<b>World-class stations</b>	Station facilities/cooperation	The station experience			SDGs 7, 9, 11, 12, 13, 17
		Customer satisfaction with stations	68.0%	77%	
<b>Safe and sustainable travel</b>	Sustainability/cooperation	Sustainable operations			Environment, SDGs 7, 9, 11, 12, 13
		Perception of NS as a sustainable business	Top 10 in 2020	12	
		Energy efficiency of traction	72%	70%	
		Waste separation	75% recycling by 2020	82%	
	Transparency	Transparency			Non-compliance
		Position in the Transparency Benchmark	top 10	3	
	Safety	Railway safety			Safety
		Number of signals passed at danger in the Netherlands	51	38	
<b>Abellio</b>	Operations in Europe	no KPI available for this	n/a	n/a	
<b>NS as an employer</b>	An attractive and caring employer	Employees			Safety
		Employee engagement	none	none	training; SDG 8
		Staff with occupational disabilities	200 in 2020	103	
		Women in senior management	none	35%	
		TRR	--	4.5	Occupational safety
		Sickness absence	5.1%	6.6%	
<b>Risk management</b>	Risk management	Risk management			
		Management of significant risks	Reports 4x a year	100%	
<b>Improvement in result and financing capacity</b>	Financial position	Financial position			Inadequate operating result, NS's investments abroad
		Revenue (in € million)		6,661	expenditure, SDG 8
		ROE		5.6%	
		Investments (in € million)		769	

## Sustainable Development Goals

The Sustainable Development Goals (SDGs) serve as the principal framework for the sustainability initiatives of Dutch companies and public authorities up to 2030. NS expects to be able to make a contribution to nine targets within seven SDGs by 2030.

We consult with our internal and external stakeholders to identify the goals to focus on and to determine whether that focus is sufficient. Most of the stakeholders agree with the selection of goals and targets. NS continued the dialogue in 2019, as part of the dialogue on strategy formulation. Targets set previously for 2020 concerning doing business in a climate-neutral and inclusive way, the 'circular economy' and accessibility will remain important in determining the direction NS takes in the next few years. Additionally, impact on third parties and sustainable enterprise will be used in steering the transport supply chain.

## NS contributes to the following Sustainable Development Goals:



### Goal 5: Take stock of where we stand as regards gender equality

In 2020, we will take stock of where we stand as an organisation and decide whether any action is required.

## Our performance in a wider context

### Punctuality in a busy railway network

A comparison of punctuality relative to occupancy in 18 countries shows that NS is in the top 3. The Netherlands has shared the top spot for many years now with Switzerland, with Japan and Austria both also achieving high levels of punctuality on heavily congested tracks. The figures have not been updated yet for 2019 as not all the data from the other operators were available.

The number of train-kilometres is the total volume of traffic on the railways (number of trains multiplied by the distance they cover). The number of route-kilometres is the length of the tracks.



## Punctuality



### Benchmark

NS works to continuously improve its performance. To that end, we also use benchmarking as a tool to help us learn from other railway companies. NS is eager to learn from the experiences of its peers in operational management and to identify any opportunities to apply the lessons learned in its own operations.

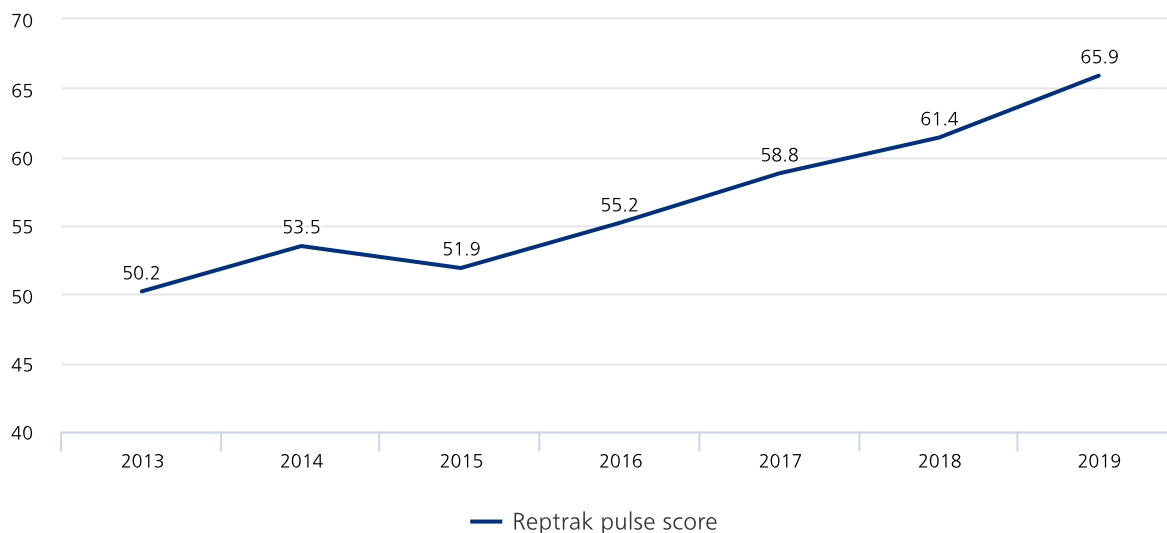
Earlier benchmarks revealed that despite the extremely busy railway network, the punctuality of NS trains is above average. NS is also in the vanguard in terms of sustainability. Its productivity levels are high while customers pay fares that are around the average, even though NS does not receive subsidies. Thanks to its high customer satisfaction scores, NS is among the top 3 for most aspects within its peer group. This can be attributed to such factors as high punctuality, improvements at many of its stations and the introduction of new rolling stock. Further studies have also identified the management focus on punctuality for passengers as a crucial factor. On busier routes, NS's policy is to cancel more trains with relatively few passengers to ensure that the more crowded trains do arrive on time. This ensures maximum punctuality for as many passengers as possible.

Although the benchmark study for 2019 has not yet been finalised, we expect that the results will be included in the midterm review that the Ministry of Infrastructure and Water Management will send to the Lower House of Dutch Parliament in 2020.

### Reputation

NS uses the RepTrak method of the Reputation Institute to monitor its reputation over time. As such, NS receives monthly analyses of its reputation in the Netherlands. Scores have consistently improved every year since 2015, with 2019 showing a record score of 65.9. The figure is derived by averaging the scores over four three-month periods. This rising trend is also reflected in a range of other indicators. Those that appear to have the most significant positive influence on our reputation are improved operational performance and high customer satisfaction rates. Media volume was marginally higher compared with 2018, but the downward trend in social media volume persisted, resulting in a slightly more negative

sentiment. In terms of news coverage, the greatest impact in 2019 came from an attack on a tram near Utrecht CS (March), a strike among NS staff (May), the debate on enforcement by NS of the burka ban (September) and the search for a person suspected of committing a violent assault on a female NS guard in Breda (November). Another issue that attracted a great deal of media coverage was the decision to compensate Holocaust survivors and survivors' relatives. The improvement of NS's reputation was also discussed in the MT (Management Team) magazine. In their annual MT500 list, NS ended up in 7th place (2018: 88th).



## Transparency

NS is transparent about its performance. Every month, it reports via [www.ns.nl](http://www.ns.nl) on the latest scores for the KPIs that have been set for the main rail network franchise, with detailed supporting evidence. NS is included in the permanent research group of the 250 largest Dutch organisations for the Transparency Benchmark. This is a tool provided by the Ministry of Economic Affairs for improving corporate sustainability reporting within the Netherlands. The results are presented in a Transparency Ladder that is made publicly available and widely communicated. In 2019, NS's 2018 Annual Report came out in third position on the Ladder. The annual report was also nominated for the Sijthoff Prize awarded by the *Financiële Dagblad* newspaper.

# Scope and reporting criteria



NS reports in accordance with the GRI Standards' Core option. The GRI Standards are the most widely accepted guidelines globally for preparing non-financial annual reports. The guidelines themselves can be found at [www.globalreporting.org](http://www.globalreporting.org). NS asked EY to perform an assurance engagement that provides limited assurance with respect to the non-financial information in the annual report.

The non-financial information can be found in the following chapters: In Brief, 2019 in a Nutshell, Our Contributions to Dutch Society, Foreword by the CEO, Our Strategy, the Profile of NS, Our Activities and Performance in the Netherlands, Our Activities and Performance Abroad, and the sections Organisational Improvement, Dialogue with our Stakeholders, and Scope and Reporting Criteria. NS feels that external assurance is important because it generates more certainty about the reliability of the information given.

## Combined report

In the NS 2019 Annual Report, the performance of NS, the social aspects of that performance and the financial results are presented as an integrated whole wherever possible. This is a deliberate choice. NS is at the heart of the community. Passenger transport by train and the commercial operation and development of stations and their surroundings are intrinsically important to society. Other social aspects, such as care for the natural and social environment, are thus also an integral component of NS's business operations.

## GRI indicators

The selection of the indicators is based on the GRI method, the 2019 Transport Plan, the discussions with our stakeholders and the resulting [material relevance matrix](#). The information that we report is based where possible on measurements and calculations (e.g. for electricity consumption). Other data is taken from central administrative systems (e.g. HR data) or based on information provided by third parties (e.g. waste). If there have been changes in the definitions, measurement methods or the inherent limits in the data or if extrapolations or estimates have been used, this is specified in the report, the definition cards for the performance indicators in the Transport Plan or the reporting criteria. The last two can be found at [www.ns.nl/mvoberekeningen](http://www.ns.nl/mvoberekeningen) and the definition cards in the 2019 Transport Plan.

## Sustainability data

Sustainability has been part of the regular planning and control cycle since 2010. This means that the data is reported in the monthly reports. The processes for collecting and validating the data are described in the CSR Handbook. The internal validation procedures are performed by our auditors. They examine deviations in the data with respect to previous reports, consider the plausibility of the data in the reports and request supporting evidence where necessary.

## Scope

The scope of the report has been determined on the basis of an analysis of the material relevance. This means that we are reporting on the material subjects and drawing on the insights yielded by this analysis when making choices about the amount of detail and limits to our reporting on these topics. The material relevance matrix shows both the theme's importance to stakeholders and the impact or influence of NS. Themes where NS has little impact or that stakeholders do not consider particularly important are not included in the report. In the context of the stakeholder dialogue in 2019, Abellio regularly provided input on material topics such as NS's financial position and operations in Europe, answered questions from stakeholders and political parties, and shared current affairs and developments abroad.

The report covers the 2019 financial year, which ran from 1 January 2019 to 31 December 2019. This report primarily concerns NS's activities in the Netherlands. The activities in the United Kingdom and Germany are also discussed where they involve operations in which NS holds a stake of more than 50%. All data has been measured unless stated otherwise in the methodology. Any estimates are carried out using the prescribed procedures in our Reporting Manual and then checked. An explanation of the margins of uncertainty in the

data quantifying our impact can be found at [www.ns.nl](http://www.ns.nl). We report on the transport supply chain as a whole where procurement is concerned or where our process of value creation gives reason to do so. The choices we have made in this regard are specified under [value creation](#). Where information covering the whole supply chain is reported, this is explicitly stated. Generally speaking, the report does not cover subcontractors or suppliers. In those parts of the report where it does, this is explained. Acquisitions are included in the data from the date of acquisition; disposals are included until the date of disposal, unless stated otherwise.

# Financial statements

# Consolidated income statement for 2019

(in millions of euros)

2019\*

2018

	2019*	2018
1 <b>Revenue</b>	<b>6,661</b>	<b>5,926</b>
2 Personnel expenses	2,305	2,166
3 Depreciation, amortisation and impairments	823	361
4 Use of raw materials, consumables and inventories	534	527
5 Own capitalised production	-147	-154
6 Costs of subcontracted work and other external costs	634	519
7 Infrastructure levies and franchise fees	1,495	1,280
8 Other operating expenses	738	1,046
<b>Operating expenses</b>	<b>6,382</b>	<b>5,745</b>
15 Share in result of investments accounted for using the equity method	8	14
<b>Result from operating activities</b>	<b>287</b>	<b>195</b>
Finance income	12	6
Finance expense	-63	-20
27 <b>Net finance result</b>	<b>-51</b>	<b>-14</b>
<b>Result before income tax</b>	<b>236</b>	<b>181</b>
9 Income tax	-21	-65
<b>Result for the reporting period</b>	<b>215</b>	<b>116</b>
Attributable to:		
Shareholder of the company	208	106
Minority interests	7	10
<b>Profit for the reporting period</b>	<b>215</b>	<b>116</b>

\* IFRS 16 was applied with effect from 1 January 2019, using the modified retrospective approach. The cumulative effect of the adoption of IFRS 16 is recognised as an adjustment in the opening balance, without restatement of comparative information as included in the general disclosures. For 2019, the application of IFRS 16 led to an increase in the result from operating activities by €33 million (increase in depreciation and amortisation costs by €422 million, decrease in other operating expenses by €454 million), an increase in the share in result of investments accounted for using the equity method by €1 million and a decrease of net finance income by €37 million, resulting in a net effect of €4 million on the profit before income tax.

# Consolidated statement of comprehensive income for 2019

(in millions of euros)

2019\*

2018

<b>Profit for the reporting period</b>	<b>215</b>	<b>116</b>
<b>Other comprehensive income items that may be reclassified to the income statement in subsequent periods</b>		
Currency translation differences on foreign activities	2	-
Changes in measurement at fair value through other comprehensive income	7	-
Effective portion of changes in fair value of cash flow hedges	2	-3
Income tax	-	-
	<b>11</b>	<b>-3</b>
<b>Other comprehensive income items that will not be reclassified to the income statement in subsequent periods</b>		
Actuarial result for defined benefit plans (see note 29)	-	-
Taxation	-	-
Actuarial result for defined benefit plans as a consequence of revaluation of investments accounted for using the equity method, after tax (see note 15)	-	-
	-	-
<b>Total comprehensive income for the reporting period</b>	<b>226</b>	<b>113</b>
Attributable to:		
Shareholder of the company	219	103
Minority interests	7	10
<b>Total comprehensive income for the reporting period</b>	<b>226</b>	<b>113</b>

\* IFRS 16 was applied with effect from 1 January 2019, using the modified retrospective approach. The cumulative effect of the adoption of IFRS 16 is recognised as an adjustment in the opening balance, without restatement of comparative information as included in the general disclosures.



# Consolidated balance sheet as at 31 December 2019

(before profit appropriation)

(in millions of euros)	31 December 2019*	31 December 2018
<b>Assets</b>		
11 Property, plant and equipment	4,260	3,979
12 Investment property	135	151
13 Intangible assets	484	416
31 Right-of-use assets	2,022	-
15 Investments accounted for using the equity method	19	17
23 Other non-current financial assets, including investments	159	159
10 Deferred tax assets	202	196
<b>Total non-current assets</b>	<b>7,281</b>	<b>4,918</b>
16 Inventories	184	169
17 Trade and other receivables	1,144	830
Income tax receivables	13	16
23 Other current financial assets, including investments	8	-
19 Cash and cash equivalents	818	906
18 Assets held for sale	-	191
<b>Total current assets</b>	<b>2,167</b>	<b>2,112</b>
<b>Total assets</b>	<b>9,448</b>	<b>7,030</b>
<b>Equity and liabilities</b>		
24 Equity		
Issued share capital	1,012	1,012
Other reserves	48	39
Retained earnings	2,495	2,459
Unappropriated result	208	106
<b>Total group equity</b>	<b>3,763</b>	<b>3,616</b>
Minority interests	18	11
<b>Equity</b>	<b>3,781</b>	<b>3,627</b>
28 Deferred credits	240	275
25 Loans and other financial liabilities, including derivatives	656	696
31 Lease liabilities	1,676	44
29 Employee benefits	35	30
30 Provisions	126	119
20 Accruals	32	42
10 Deferred tax liabilities	54	48
<b>Total non-current liabilities</b>	<b>2,819</b>	<b>1,254</b>
25 Loans and other financial liabilities, including derivatives	99	96
31 Lease liabilities	433	2
Income tax payable	10	12
21 Trade and other liabilities	1,497	1,315
22 Deferred income	738	694
30 Provisions	71	24
18 Liabilities held for sale	-	6
<b>Total current liabilities</b>	<b>2,848</b>	<b>2,149</b>
<b>Total liabilities</b>	<b>5,667</b>	<b>3,403</b>
<b>Total equity and liabilities</b>	<b>9,448</b>	<b>7,030</b>

\* IFRS 16 was applied with effect from 1 January 2019, using the modified retrospective approach. The cumulative effect of the adoption of IFRS 16 is recognised as an adjustment in the opening balance, without restatement of comparative information as included in the general disclosures. At year-end 2019, the application of IFRS led to an increase in the balance sheet total by approximately €2 billion due to the recognition of Right-of-use assets and Lease liabilities.

# Consolidated cash flow statement for 2019

(in millions of euros)	2019*	2018
Profit for the reporting period	215	116
<b>Adjustments for:</b>		
9 Income tax	21	65
15 Results from investments accounted for using the equity method	-8	-14
11,12,13 Depreciation	823	361
11,12,13 Impairment losses and reversals	-	-
26 Net financing result	51	14
Change in provisions	102	18
15.23 Change in non-current financial assets (excluding deferred tax positions)	-	-
Change in other non-current liabilities not resulting in cash flows	-41	-31
Change in deferred credits	-35	-39
	<b>913</b>	<b>374</b>
Change in inventories	-14	-8
Change in trade and other receivables	-124	-142
Change in current liabilities	225	629
<b>Movements in working capital</b>	<b>87</b>	<b>479</b>
Financing burden paid	-60	-17
Income tax paid	-9	-15
	<b>-69</b>	<b>-32</b>
<b>Net cash flow from operating activities</b>	<b>1,146</b>	<b>937</b>
Finance income received	14	5
15 Dividends from investments accounted for using the equity method	10	14
Disposal (acquisition) of subsidiaries, net of cash disposed of (acquired)	-	-
11.13 Acquisition of intangible assets and property, plant and equipment	-767	-898
12 Acquisition of investment properties	-2	-
Receipts (payments) from other investments	-	-
Acquisition of non-current financial assets, including investments	-36	-33
15.23 Disposal of non-current financial assets, including investments	12	30
11,12,13 Disposal of intangible assets, property, plant and equipment and investment properties	19	228
<b>Net cash flow from investing activities</b>	<b>-750</b>	<b>-654</b>
<b>Net cash flow from operating and investing activities</b>	<b>396</b>	<b>283</b>
25 Repayment of borrowings	-454	-431
25 Repayment of lease liabilities	-420	-
25 New borrowings	400	504
Dividends paid	-37	-8
<b>Net cash flow from financing activities</b>	<b>-511</b>	<b>65</b>
Net decrease/increase in cash and cash equivalents	-115	348
Cash and cash equivalents as at 1 January	906	565
Effect of exchange and translation differences on cash held	23	-3
Cash and cash equivalents classified as held for sale	4	-4
<b>Cash and cash equivalents as at 31 December</b>	<b>818</b>	<b>906</b>

\* IFRS 16 was applied with effect from 1 January 2019, using the modified retrospective approach. The cumulative effect of the adoption of IFRS 16 is recognised as an adjustment in the opening balance, without restatement of comparative information as included in the general disclosures. Over the course of 2019, the application of IFRS 16 resulted in a shift from net cash flow from operating activities (approximately + €400 million) to net cash flow from financing activities (approximately - €400 million).

# Consolidated statement of changes in equity

(in millions of euros)	Issued capital	Other reserves	Retained earnings	Unappropriated result	Total	Minority interests	Total equity
<b>Balance as at 31 December 2017</b>	<b>1,012</b>	<b>-3</b>	<b>2,421</b>	<b>46</b>	<b>3,476</b>	<b>1</b>	<b>3,477</b>
Adjustments due to application of IFRS 9		45	-		45	-	45
<b>Revised balance as at 1 January 2018</b>	<b>1,012</b>	<b>42</b>	<b>2,421</b>	<b>46</b>	<b>3,521</b>	<b>1</b>	<b>3,522</b>
Result				106	106	10	116
Other comprehensive income		-3			-3	-	-3
<b>Total comprehensive income for the reporting period</b>	<b>-</b>	<b>-3</b>		<b>106</b>	<b>103</b>	<b>10</b>	<b>113</b>
Dividend paid to shareholders			-8		-8	-	-8
Other		-	46	-46	-	-	-
<b>Balance as at 31 December 2018</b>	<b>1,012</b>	<b>39</b>	<b>2,459</b>	<b>106</b>	<b>3,616</b>	<b>11</b>	<b>3,627</b>
Adjustments due to application of IFRS 16		-2	-32	-	-34	-1	-35
<b>Revised balance as at 1 January 2019</b>	<b>1,012</b>	<b>37</b>	<b>2,427</b>	<b>106</b>	<b>3,582</b>	<b>10</b>	<b>3,592</b>
Result				208	208	7	215
Other comprehensive income		11			11	-	11
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>11</b>	<b>-</b>	<b>208</b>	<b>219</b>	<b>7</b>	<b>226</b>
Dividend paid to shareholders			-37		-37	-	-37
Other		-	105	-106	-1	1	-
<b>Balance as at 31 December 2019</b>	<b>1,012</b>	<b>48</b>	<b>2,495</b>	<b>208</b>	<b>3,763</b>	<b>18</b>	<b>3,781</b>

## Notes to the 2019 consolidated financial statements

The notes are divided into six sections. The notes contain the relevant information as well as a description of the specific accounting policies applied in the case of the subject of that particular note.

# Section 1 General information and significant accounting policies

## General information

NV Nederlandse Spoorwegen has its registered office on Laan van Puntenburg in Utrecht, the Netherlands (Chamber of Commerce number 30012558). The company's consolidated financial statements for the 2019 financial year include the company and its subsidiaries (hereinafter referred to as the 'Group') and the Group's share in associates and companies that it controls jointly with third parties. NV Nederlandse Spoorwegen is the holding company of NS Groep NV, which in turn is the holding company of the operating companies that carry out the Group's various business operations. The figures for the consolidated financial statements of NS Groep NV are the same as the consolidated figures for NV Nederlandse Spoorwegen. The operating companies of NS Groep NV are listed in note 33. The Group's activities consist mainly of passenger transport, the management and development of property and the operation of station locations.

The Executive Board prepared the financial statements on 26 February 2020. In its preliminary report to the General Meeting of Shareholders, the Supervisory Board advised that the financial statements should be adopted unaltered. On 26 February 2020, the Executive Board and Supervisory Board approved the publication of the financial statements. Adoption of the financial statements is on the agenda of the General Meeting of Shareholders on 10 March 2020.

## Acquisition and disposal of companies

The following sales transaction of equity interests took place in 2019.

### DISA

On 2 October 2018, the Group resolved to dispose of the company DISA Assets Ltd (subsidiary of NSFHS). From that date, the assets and liabilities were reclassified as held for sale and the assets were no longer depreciated. On 10 April 2019, the Group disposed of its 100% interest in the company DISA Assets Ltd. The accounting for the transaction was based primarily on its substance (sale and leaseback) rather than its legal form. As a result, a large portion of the book profit is recognised over the term of the lease.

The portion of the gain on sale (difference between the sales proceeds of €17 million and the net asset value) of this transaction that does not relate to the value of the right-of-use assets acquired was recognised in 2019. This portion amounted to €2 million.

## Significant accounting policies

Below is a description of the accounting policies for consolidation, the measurement of assets and liabilities and the determination of the result of the Group. These policies are in accordance with IFRS, insofar as they are accepted by the EU and are applied consistently to all information that is presented. Furthermore, insofar as applicable, the financial statements comply with the legal regulations as included in Part 9 of Book 2 of the Dutch Civil Code. The Group applies the historical cost price system as measurement basis, unless stated otherwise.

As of 1 January 2019, the Group has adopted the following new standards and amendments to standards, including all consequent changes deriving from them in other standards.

### IFRS 16 Leases

IFRS 16 introduces an unambiguous 'on-balance' reporting model for lessees. For the Group, as a lessee, this results in capitalisation of the right-of-use assets, representing the right to use the underlying assets, and lease liabilities, representing the obligation to make future lease payments.

The Group has applied IFRS 16 from 1 January 2019, using the modified retrospective approach. Therefore, the cumulative effect of the adoption of IFRS 16 has been recognised as a restatement in the opening balance on 1 January 2019, without restatement of comparative information. The Group has elected not to use the practical expedient to apply the standard only to contracts previously identified as lease arrangements on the date of initial application of IAS 17 and IFRIC 4. Instead, it has carried out a comprehensive new assessment of all lease contracts.

The Group has elected to use the exemptions for the recognition of lease contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option ('short-term lease arrangements') and lease contracts for which the underlying asset is of low value.

The effect of applying IFRS 16 as at 1 January 2019 is as follows:

(in millions of euros)	1 januari 2019
Property, plant and equipment	-31
Right-of-use assets	1,593
Investments accounted for using the equity method	-2
Deferred tax assets	9
Finance lease liability	46
Lease liability	-1,650
Equity	35
- other reserves	2
- retained earnings	32
- minority interest	1

The effect on equity of €35 million reflects the recognition of lease contracts in Germany and the United Kingdom, as a result of which the difference between the right-of-use assets and the lease liability, net of the deferred tax liability, has been accounted for in equity. In the Netherlands, the value of the right-of-use assets as at 1 January 2019 has been equated with the value of the lease liability as at 1 January 2019.

The impact on the income statement for 2019 is as follows:

(in millions of euros)	2019
Depreciation	422
Rental costs	-454
Share in result of investments accounted for using the equity method	1
<b>Result from operating activities</b>	<b>33</b>
Interest expense	-37
Income tax	-
<b>Profit for the reporting period</b>	<b>-4</b>

### ***Nature of the effect of applying IFRS 16***

The Group has lease contracts for rolling stock, real estate and other operating assets. Prior to the application of IFRS 16, the Group classified each of its lease arrangements (as lessee) as a finance lease or operating lease on the commencement date. A lease arrangement was classified as a finance lease if it substantially transferred all the risks and rewards incidental to ownership of the leased asset to the Group. Otherwise, the lease was classified as an operating lease. Finance leases were capitalised at the fair value of the leased asset or, if lower, the present value of the minimum lease payments, upon commencement of the lease arrangement. Lease payments were apportioned between interest (recognised as financing costs) and reduction of the lease liability. For operating leases, the leased property was not capitalised and the lease payments were recognised on a straight-line basis as rental expenditure in the income statement during the lease term. Any prepaid rent and accrued rent were recognised in Prepayments and Trade and other payables, respectively.

In applying IFRS 16, the Group applied a single method of recognition and measurement for all lease arrangements, except short-term lease arrangements and lease arrangements for low-value assets. The standard provides for specific transitional requirements and practical benefits, which have been applied by the Group. The cash flow statement has been modified for IFRS 16 by including a line item 'repayment of lease liability' under net cash flow from financing activities.

### ***Lease arrangements previously classified as finance leases***

The Group has not changed the initial carrying amount of the recognised assets and liabilities on the date of initial application for lease arrangements previously classified as finance leases (i.e. the right-of-use assets and liabilities are equal to the assets and liabilities that were recognised under IAS 17). The requirements of IFRS 16 were applied to these lease arrangements as from 1 January 2019.

### ***Lease arrangements previously classified as operating leases***

The Group has recognised right-of-use assets and lease liabilities for the lease arrangements that were previously classified as operating leases. Short-term lease arrangements, lease arrangements for low-value assets and arrangements that were not determined to be within the scope of the definition of a lease in the comprehensive assessment were exempted from this.

For the lease contracts in Germany and the United Kingdom, the right-of-use assets were recognised based on the carrying amount as if the standard had always been applied, apart from the use of the incremental borrowing rate of interest on the date of initial application. For the leases in the Netherlands, the right-of-use assets were recognised based on the amount that is equal to the lease liabilities, adjusted for any prepaid and current lease payments recognised previously. Lease liabilities have been recognised based on the present value of the remaining lease payments, discounted by applying the incremental borrowing rate of interest on the date of initial application.

The lease liabilities as at 1 January 2019 can be reconciled with the operating lease liabilities as at 31 December 2018 as follows:

(in millions of euros)

Operating lease liabilities as at 31 December 2018	4,811
Weighted average incremental borrowing rate as at 1 January 2019	-217
<b>Discounted operating lease liabilities as at 1 January 2019</b>	<b>4,594</b>
<b>Less:</b>	
Liabilities under short-term lease arrangements	-7
Effect of lease arrangements for assets to be delivered after 1 January 2019, presented in the note on operating lease liabilities as at 31 December 2018 and not in the lease liabilities as at 1 January 2019	-1,736
Non-lease components presented in the note on operating lease liabilities as at 31 December 2018 and not in the lease liabilities as at 1 January 2019	-1,195
Lease payments concerning extension periods recognised in the operating lease liabilities as at 31 December 2018, but which are not 'reasonably certain'	-35
Liabilities under leases of low-value assets	-14
Other	-12
<b>Add:</b>	
Liabilities under leases previously classified as finance leases	46
Lease payments concerning extension periods not recognised in the operating lease liabilities as at 31 December 2018	9
<b>Lease liabilities as at 1 January 2019</b>	<b>1,650</b>

### ***Incremental borrowing rate of interest***

To calculate the present value of the lease liabilities, the Group uses the incremental borrowing rate of interest at the commencement date of the lease arrangement. After the commencement date, the amount of the lease liabilities is increased to reflect the increase in the interest rate and reduced by the lease payments made. In addition, the carrying amount of the lease liabilities is revaluated in the event of a change in the lease term, in the specified fixed lease payments or in the assessment of the purchase of the underlying asset.

The interest rate is determined on the basis of the incremental borrowing rate of interest derived from the internal rating model by country with a deduction for asset-specific elements. The interest rate applied depends on the term of the contract and varies as follows:

Incremental borrowing rate (in percentages)	range	applied
The Netherlands	-0.3%-2.0%	0.5%
The United Kingdom	1.2%-6.4%	2.5%
Germany	-0.2%-2.7%	1.5%

### ***Other***

The following new or amended standards have not had a significant impact on the Group's consolidated financial statements:

- Uncertainty over income tax treatments (IFRIC interpretation 23);
- Amendments to IFRS 9: Prepayment Features with Negative Compensation ;

- Plan Amendment, Curtailment or Settlement (Amendments to IAS 19);
- Long-term Interests in Associates and Joint Ventures (Amendments to IAS 28);
- Annual Improvements to IFRS Standards 2015–2017 Cycle.

### ***New standards and amendments to standards that are mandatory from 2020 or later***

The Group has not voluntarily opted for the early adoption of any new standards or amendments to existing standards or interpretations that are only mandatory with effect from the financial statements for 2020 or later.

The following new or amended standards have no significant impact on the consolidated financial statements of the Group:

- Amendments to References to the Conceptual Framework in IFRS Standards (effective 1 January 2020);
- Amendments to IFRS 3 Business Combinations (effective 1 January 2020);
- Amendments to IAS 1 and IAS 8: Definition of Material (effective 1 January 2020);
- Interest Rate Benchmark Reform (amendments to IFRS 9, IAS 39 and IFRS 7 (effective 1 January 2020).

### ***Estimates and assessments***

The preparation of the financial statements requires the Executive Board to make judgements and estimates that affect the application of accounting policies and the reported value of assets and liabilities, and income and expenses. The estimates and corresponding assumptions are based on experiences from the past and various other factors that could be considered reasonable under the circumstances. The actual outcomes may differ from these estimates. The estimates and underlying assumptions are reviewed on a regular basis. Revisions of estimates are recognised in the period in which the estimate is revised or in future periods if the revision relates to those periods.

The key estimates and assessments concern: mainly estimates of infrastructure levy and franchise fees (note 7) and also leases (note 31), receivables (note 17), provisions/off-balance sheet arrangements (note 30 and note 32) and measurement of deferred tax assets (note 10). The estimates concerning leases mainly relate to reasonable certainty of any extension and termination options.

The accounting policies described below have been applied consistently for the periods presented in these consolidated financial statements, except for IFRS 16, which has only been applied for 2019.

### **Accounting policies for consolidation**

#### ***Subsidiaries***

The Group has control over an entity if its involvement with that entity means that the Group is exposed to or is entitled to variable returns and that it has the power to influence those returns by virtue of its say in that entity. The financial statements of the subsidiaries are incorporated in the consolidated financial statements as from the date on which control commences until the date on which control ceases.

In the event of a loss of control over the subsidiary, the subsidiary's assets and liabilities, any minority interests and other equity components associated with the subsidiary are no longer recognised in the balance sheet. Any surplus or shortfall is recognised in the income statement. If the Group retains an interest in the former subsidiary, that interest is recognised at the fair value on the date on which the Group ceased to exercise control.



### **Acquisition of subsidiaries**

Business combinations are recognised according to the acquisition method as at the date on which control is transferred to the Group. The remuneration for the acquisition is assessed at its fair value, as are the net identifiable assets that are acquired. Any goodwill deriving from this is assessed annually for impairments. Any gain from a beneficial sale is recognised directly in the income statement. Transaction costs are recognised at the time when they are incurred.

### **Elimination of transactions on consolidation**

Intra-group balances and transactions plus any unrealised gains and losses on transactions within the Group or revenues and expenses from such transactions are eliminated. Unrealised gains arising from transactions with investments accounted for using the equity method are eliminated in proportion to the Group's interest in the investment. Unrealised losses are eliminated in the same way as unrealised gains, but only insofar as impairment is not indicated.

### **Currency translation**

#### **Foreign currency transactions**

Transactions denominated in foreign currency are translated to the functional currency of the Group entity concerned at the exchange rate prevailing on the date of the transaction. Monetary assets and liabilities that are denominated in foreign currencies are translated to the functional currency at the exchange rate prevailing on the balance sheet date. Non-monetary assets and liabilities denominated in foreign currency that are measured at fair value are translated to the functional currency using the exchange rates that prevailed at the dates when the fair values were determined. Non-monetary assets and liabilities denominated in foreign currency that are measured at historical cost are not retranslated.

The exchange rate differences arising on translation of the following items are recognised in other comprehensive income:

- financial liabilities that are designated as a hedge of the net investment in a foreign operation;
- qualifying cash flow hedges, insofar as the hedge is effective.

#### **Foreign operations**

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on consolidation, are translated into euros at the exchange rates prevailing on the reporting date. The revenues and costs of foreign operations are converted into euros at an average exchange rate that approximates the exchange rate on the transaction date.

Currency translation differences are included in the other comprehensive income and accounted for in the translation reserve. If the Group ceases to have control, significant influence or joint control due to the disposal of a foreign operation, the cumulative amount in the translation reserve will be reclassified to profit or loss when the profit or loss from the disposal is recognised. If the Group only sells part of its interest in a subsidiary, while retaining control, a proportionate share of the cumulative amount will be reassigned to the minority interest. If the Group only sells part of its interest in an associate or joint venture, while retaining significant influence or joint control, a proportionate share of the cumulative amount will be re-allocated to the income statement.

#### **Determination of fair value**

A number of the Group's accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. Fair values for measurement and/or disclosure purposes were determined using the following methods.

### **Investment property**

In view of the nature, diversity and locations (station areas), the fair value of the investment property portfolio is not determined on a regular basis unless impairment is indicated. The fair value is expected to exceed the carrying amount of the investment property. Investment property is measured at cost, less accumulated depreciation and accumulated impairment losses.

### **Investments in non-current financial assets**

The fair value of investments in debt instruments is determined using the price on the reporting date. The fair value of the equity investment (Eurofima) has been determined on the basis of the latest available financial statements.

### **Derivatives**

The fair value of derivatives is based on the derived market prices, taking account of the current interest rates and estimated creditworthiness of the counterparties to the contract.

### **Non-derivative financial liabilities**

The fair value of non-derivative financial liabilities is determined for disclosure purposes and is calculated based on the present value of future repayments and interest payments, discounted at the market interest rate as at the reporting date. For finance leases, the market interest rate is determined by reference to similar lease arrangements.

### **Segment information**

The Group is under no obligation to comply with the requirements of IFRS 8 because it is not listed on a stock exchange. Segment information with a breakdown of revenue and FTEs by geographical area has been included in order to comply with the requirements of Dutch legislation and regulations.

### **Accounting policies for the consolidated cash flow statement**

The cash flow statement is drawn up using the indirect method, using a comparison between the initial and final balances for the financial year in question. The result is then adjusted for changes that did not generate revenue or expenses during the financial year.

## Section 2 Result for the year

### *1. Revenue*

In the following table, revenues are broken down into a combination of transport type and geographic area.

(in millions of euros)	2019	2018
Train-related transport in the Netherlands	2,661	2,510
Station development and operation in the Netherlands	547	592
Train-related transport in the United Kingdom	2,696	2,248
Bus-related transport in the United Kingdom	223	219
Train-related transport in Germany	534	357
<b>Total revenue</b>	<b>6,661</b>	<b>5,926</b>

Station development and operation in the Netherlands includes an amount of €32 million (2018: €27 million) relating to development activities.

The increase in revenue from train-related transport in the United Kingdom is mainly due to the start of the East Midlands concession on 18 August 2019.

## Accounting policies

### Revenue

Revenue is recognised on the basis of the fee established in a contract with a customer. The Group recognises revenue when it transfers control of a good or service to a customer. Sales include the transport revenues and revenues from other business activities less discounts and turnover tax.

### Provision of services and sale of goods

Revenue from the sale of travel rights is recognised when the travel right arises. Revenue from season tickets is recognised over time and spread over the period in the profit and loss account over the validity of the period of the season ticket.

Revenue from the sale of goods is recognised in the income statement when control of the goods has been transferred to the buyer, recovery of the consideration due is probable and the associated costs or any returns of goods can be estimated reliably. Government or similar fees arising from transport contracts or franchises are recognised in the income statement over the period to which the fee relates.

### Rental income

Rental income from property is recognised in the income statement over time, over the term of the lease. Commitment costs incurred as an incentive to enter into lease arrangements are recognised as an integral part of the total rental income and spread on a straight-line basis over the contract period.

## 2. Personnel expenses

(in millions of euros)	2019	2018
Wages and salaries	1,746	1,629
Social security contributions	236	205
Contributions to defined contribution plans	103	107
Contributions to defined benefit plans	40	32
Other personnel expenses	75	82
Staff hired in	105	111
<b>Total</b>	<b>2,305</b>	<b>2,166</b>

The average workforce was as follows.

(in FTEs)	2019	2018
The Netherlands	17,792	18,734
The United Kingdom	15,955	12,936
Germany	2,365	1,657
<b>Total</b>	<b>36,112</b>	<b>33,327</b>

The workforce as at the end of the financial year was as follows:

(in FTEs)	2019	2018
The Netherlands	17,750	18,381
The United Kingdom	16,247	13,162
Germany	2,676	2,028
<b>Total</b>	<b>36,673</b>	<b>33,571</b>

The increase in the number of FTEs in the United Kingdom (both the average number and as at 31 December) was mainly attributable to the start of the East Midlands franchise on 18 August 2019.

## Remuneration of the Executive Board

(in euros)	Basic salary	Alternative for the cap on pension accrual	Payment of lease amounts	Allowance for additional tax liability for director's car	Various allowances	Pension expenses	Total 2018
Mr R.H.L.M. van Boxtel	460,294	42,626	-	11,093	4,368	14,677	533,058
Mr H.L.L. Groenewegen	361,014	30,713	16,920	2,738	4,368	14,677	430,430
Ms M.E.F. Rintel	361,014	33,272	2,784	2,738	4,368	14,677	418,852
Ms S.M. Zijderfeld	361,014	30,713	16,920	2,738	4,368	14,677	430,430
Mr T.B. Smit	361,014	30,713	-	2,738	4,368	14,677	413,510
<b>Total</b>	<b>1,904,350</b>	<b>168,036</b>	<b>36,624</b>	<b>22,045</b>	<b>21,840</b>	<b>73,385</b>	<b>2,226,280</b>

(in euros)	Basic salary	Alternative for the cap on pension accrual	Payment of lease amounts	Allowance for additional tax liability for director's car	Various allowances	Pension expenses	Total 2019
Mr R.H.L.M. van Boxtel	469,593	43,440	-	9,588	4,368	15,009	541,998
Mr H.L.L. Groenewegen	368,308	31,286	16,920	2,400	4,368	15,009	438,291
Ms M.E.F. Rintel	368,308	33,893	2,784	2,400	4,368	15,009	426,762
Ms S.M. Zijderfeld*	122,402	10,385	5,640	800	1,456	5,003	145,686
Mr T.B. Smit	368,308	31,286	-	2,400	4,368	15,009	421,371
Ms A.M.E. de Vries**	78,918	6,728	967	510	928	3,187	91,238
<b>Total</b>	<b>1,775,837</b>	<b>157,018</b>	<b>26,311</b>	<b>18,098</b>	<b>19,856</b>	<b>68,228</b>	<b>2,065,347</b>

\* Ms Zijderfeld stepped down with effect from 1 May 2019

\*\* Ms De Vries became a member of the Executive Board with effect from 15 October 2019

Please refer to the chapter 'Remuneration of the Executive Board' in the directors' report for more details on the remuneration policy for the Executive Board.

## Remuneration of key management personnel (excluding the Executive Board)

(in euros)	Fixed and variable remuneration	Pension expenses	Severance payment (excluding legal costs)	Total
2018	2,346,038	125,964	-	2,472,002
2019	1,946,593	115,350	-	2,061,943

These are managers with powers under the Articles of Association and managers with a specific portfolio.

## Remuneration of the Supervisory Board

The remuneration of members of the Supervisory Board for 2019 paid by the company totalled €233,792 (2018: €226,053). The remuneration consists of a fixed fee and an allowance for participating in one or more committees. The amounts for each member of the Supervisory Board are as follows:

(in euros)	2019	2018
G.J.A. van de Aast <i>Chair of the Supervisory Board, member of the Risk and Audit committee, member of the Remuneration and Nomination Committee</i>	46,545	45,624
J.J.M. Kremers <i>Chair of the Risk and Audit Committee</i>	38,495	37,734
P. Rosenmöller <i>Chair of the Remuneration and Nomination Committee, vice-chair of the Supervisory Board (until 1 June 2019)</i>	19,401	44,778
N. Albayrak (from 1 June 2019) <i>Member of the Risk and Audit Committee, member of the Remuneration and Nomination Committee (both from 1 July 2019)</i>	20,546	-
M.E. van Lier Lels <i>Member of the Risk and Audit committee, vice-chair of the Remuneration and Nomination Committee (from 1 July 2019)</i>	35,905	32,327
J.L. Stuijt <i>Member of the Risk and Audit committee, chair of the Remuneration and Nomination Committee (from 1 July 2019)</i>	38,526	34,146
W.J. van der Feltz <i>Member of the Risk and Audit committee, member of the Remuneration and Nomination Committee (from 1 July 2019)</i>	34,374	31,444
<b>Total</b>	<b>233,792</b>	<b>226,053</b>

The average allowances for 2019 for the various roles (excluding expense allowances) are as follows:

(in euros)	2019	2018
Chair of the Supervisory Board	38,605	37,840
Vice-chair of the Supervisory Board	34,192	33,516
Member of the Supervisory Board	28,678	28,110
Chair of the Risk and Audit Committee	8,272	8,108
Member of the Risk and Audit Committee	2,757	2,703
Chair of the Remuneration and Nomination Committee	8,272	8,108
Member of the Remuneration and Nomination Committee	2,757	2,703

The company has not provided any loans, advances or guarantees to members of the Executive Board or the Supervisory Board.

All shares of NV Nederlandse Spoorwegen are held by the State of the Netherlands. Members of the Executive and Supervisory Boards and staff members have not been granted rights to hold or acquire shares in the company.

### 3. Depreciation, amortisation and impairments

(in millions of euros)	2019*	2018
Depreciation of property, plant and equipment	322	291
Depreciation of investment property	8	8
Amortisation of intangible assets	71	62
Depreciation of right-of-use assets	422	-
<b>Total depreciation and amortisation</b>	<b>823</b>	<b>361</b>
Impairments (and reversal of impairments) of property, plant and equipment	-	-
Impairments of investment property	-	-
Impairments of intangible assets	-	-
Impairments of right-of-use assets	-	-
<b>Total impairments</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>823</b>	<b>361</b>

\* IFRS 16 was applied with effect from 1 January 2019, using the modified retrospective approach. The cumulative effect of the adoption of IFRS 16 is recognised as a restatement in the opening balance, without restatement of comparative information as included in the general disclosures.

For information on impairments of non-current assets, please refer to note 14.

### 4. Use of raw materials, consumables and inventories

(in millions of euros)	2019	2018
Materials used	296	328
Energy consumption	238	199
<b>Total</b>	<b>534</b>	<b>527</b>

## 5. Own capitalised production

The own capitalised production in 2019 of €147 million (2018: €154 million) refers mainly to the refurbishment of trains.

### Accounting policies

The own capitalised production comprises the directly attributable personnel expenses, costs of materials and attributable indirect costs incurred in the construction of assets for own use.

## 6. Subcontracted work and other external costs

(in millions of euros)	2019	2018
Costs of subcontracted work	143	113
Remediation costs	99	100
Maintenance	185	123
Automation costs	207	183
<b>Total</b>	<b>634</b>	<b>519</b>

The costs of subcontracted work are the costs relating to the execution of assignments by third parties that are not covered by the other items in this category.

## 7. Infrastructure levies and franchise fees

(in millions of euros)	2019	2018
Dutch train franchises	408	394
UK train franchises	856	741
German train franchises	231	145
<b>Total</b>	<b>1,495</b>	<b>1,280</b>

The infrastructure levies and franchise fees for the railways in the United Kingdom include an amount of €18 million (2018: €41 million) relating to the mechanism of Central London Employment (CLE), as included in the Greater Anglia franchise agreement with the Department for Transport (DfT). Within the total registered CLE impact in 2019, an amount of €6 million relates to prior years (2018: €19 million).

## Accounting policies

### Adjustment mechanisms for UK franchises

The implementation agreement with the Ministry of Infrastructure and Water Management includes a number of adjustment mechanisms for determining the franchise price. The adjustment relating to the average profitability during the franchise is recognised as a receivable when the right arises in accordance with the calculation system, as laid down in the implementation agreement. The adjustment is recognised on a straight-line basis over the term of the franchise. Other payments, one-off or otherwise, under the agreement are recognised on a straight-line basis over the term of the franchise.

### Adjustment mechanisms for UK franchises

The franchise agreements, mainly with the Department for Transport, Transport Scotland and the infrastructure operator Network Rail, contain a number of adjustment mechanisms, including that for 'Central London Employment (CLE)', for adjusting the franchise fee and for a compensation for lost revenues due to work on the rail infrastructure. The CLE is an index that is adjusted annually, following which the franchise fee in the financial year concerned can be adjusted for this by the DfT and be reported. The right to compensation for lost revenues and the method of calculating it are contractually determined and recognised in the year in which the loss of revenue occurred on the basis of an estimated calculation.

## 8. Other operating expenses

'Other operating expenses' include insurance, accommodation costs, costs of fixtures and fittings, auditor's fees, marketing costs, maintenance costs for operating assets and additions to provisions. The decrease in other operating expenses from €1,046 million in 2018 to €738 million in 2019 was mainly attributable to the application of IFRS 16 (no longer any lease costs in 2019).

### Auditor's fees

(in millions of euros)	2019	2018
Statutory audits	3.9	3.4
Other assurance engagements	0.5	0.3
Tax advisory services	-	-
Other services	-	-
<b>Total</b>	<b>4.4</b>	<b>3.7</b>

The auditor's fees comprise both the fees for services in the Netherlands and those for the networks abroad.



## 9. Income tax

(in millions of euros)	2019	2018
Recognised in the income statement		
Current income tax	-10	-9
Deferred income tax	-11	-56
<b>Total income tax</b>	<b>-21</b>	<b>-65</b>
<i>Reconciliation with effective tax rate</i>		
<b>Profit before tax</b>	<b>236</b>	<b>181</b>
Income tax at Dutch tax rate for corporation tax (2018 and 2017: 25%)	-59	-45
Settlement of previous years	-1	-
Participation exemption	5	4
Effect of the tax rate in foreign jurisdictions (different rate)	10	4
Adjustment of losses available for set-off, Germany	-3	-
Changes in rates for deferred tax positions	7	-22
Untaxed income (Fyra receipt, refund of ACM fine)	15	-4
Addition of mixed costs, investment credit, etc.	5	-2
<b>Total income tax</b>	<b>-21</b>	<b>-65</b>
Income tax on income and expenses recognised in the other comprehensive income	0	0

Corporation tax is calculated based on the applicable tax rates in the Netherlands, the United Kingdom, Ireland and Germany, taking into account the tax rules that give rise to permanent differences between the determination of the profit for commercial purposes and the determination for tax purposes. The tax rules include the participation exemption and limits applying to deductible costs.

The effective tax rate for profit before corporation tax was 9% (2018: 36%). This low effective tax rate compared with the nominal tax rate mainly reflected the imposition of the fine from the Netherlands Authority for Consumers and Markets (ACM) (which was not deductible in 2017) and an untaxed supplementary payment due to the sale of the fyra trains, as well as the deduction relating to energy investments.

The tax returns up to and including 2015 have been agreed with the Dutch Tax and Customs Administration. A final assessment has been received for 2015, but not yet for the subsequent years. In the financial statements for this year and previous years, tax is recognised on the basis of the tax returns submitted up to and including 2018, the underlying principles adopted in those tax returns and any adjustments to previous years.

The rates of corporation tax for the coming years have been reduced (see 10). The effect of the recalculation of the deferred tax amounts has led to an upward adjustment of €7 million (2018: write-down of €22 million) and has been recognised in the 2019 income statement.

## Accounting policies

Tax on the profit or loss for the financial year comprises the income tax that is payable or can be offset in the reporting period and deferred taxation. Income tax is recognised in the income statement, except insofar as it relates to items recognised directly in equity through other comprehensive income, in which case the tax is recognised in equity through other comprehensive income. All tax items are stated at nominal value.

The tax to be paid or offset for the financial year is the expected tax charge on taxable profit for the financial year, calculated using the tax rates prevailing on the balance sheet date, plus adjustments to tax payable for prior years.

For the purpose of income tax, nearly all the subsidiaries belonging to the Group are part of the NS tax group, with the exception of the foreign group entities.

## 10. Deferred income tax

The changes in deferred tax assets and liabilities are as follows.

(in millions of euros)	Net balance as at 1 January 2018	recognised in income statement	recognised in other comprehensive income	other changes	Net positions as at 31 December 2018	Deferred tax assets	Deferred tax liabilities
Property, plant and equipment	83	-12	-	-	71	93	22
Intangible assets	-18	-	-	-	-18	-	18
Non-current financial assets	-8	2	-	3	-3	4	7
Receivables	2	-2	-	-	-	-	-
Provisions	-1	3	-	-	2	2	-
Deferred credits	58	-15	-	-	43	43	-
Loans and other financial liabilities	2	-2	-	-	-	-	-
Other items	-1	4	-	-	3	4	1
Loss set-off	84	-34	-	-	50	50	-
<b>Deferred tax assets (liabilities)</b>	<b>201</b>	<b>-56</b>	<b>-</b>	<b>3</b>	<b>148</b>	<b>196</b>	<b>48</b>

(in millions of euros)	Net balance as at 1 January 2019	Adjustments due to application of IFRS 16	recognised in income statement	recognised in other comprehensive income	Other changes	Net positions as at 31 December 2019	Deferred tax assets	Deferred tax liabilities
Property, plant and equipment	71	-	11	-	2	84	107	23
Intangible assets	-18	-	-1	-	-	-19	-	19
Right-of-use assets	-	-436	-8	0	0	-444	-444	-
Non-current financial assets	-3	-	-	-	-	-3	4	7
Receivables	-	-	-	-	-	-	-	-
Provisions	2	-	1	-	-	3	3	-
Deferred credits	43	-	-5	-	-	38	43	5
Loans and other financial liabilities	-	-	-	-	-	-	-	-
Lease liabilities	-	445	5	-	0	450	450	-
Other items	3	-	-	-	-	3	3	-
Loss set-off	50	-	-14	-	0	36	36	-
<b>Deferred tax assets (liabilities)</b>	<b>148</b>	<b>9</b>	<b>-11</b>	<b>-</b>	<b>2</b>	<b>148</b>	<b>202</b>	<b>54</b>

Net operating losses that are categorised as tax losses under Dutch tax law and that arise in the Dutch subsidiaries can in general be offset against future profits recorded in the six years after the year in which the loss was incurred, and can be offset against the profit recorded in the year preceding the year of the loss. There are similar rules for the positions in foreign enterprises.

As at 31 December 2019, the Group had deferred tax assets of €144 million for the tax group in the Netherlands (31 December 2018: €156 million). These deferred tax assets are partly covered by deferred tax liabilities that lead to taxable profits in the reference period up to and including 2026 and forecast profits up to and including 2026, mainly based on the Group Plan 2020-2024. The forecasts are based on the current composition of the Group's activities and take into account the main rail network franchise that started on 1 January 2015. The deferred tax asset relating to loss carry-forwards in the Netherlands was realised in full at the end of 2019.

Following assessment of the deferred tax asset relating to loss carry-forwards in Germany of €39 million gross, it was written down by an amount of €3 million to €36 million.

For the calculation of the deferred tax position of the Dutch entities, the applicable rate of 25% for 2019, 25% for 2020 and 21.7% for subsequent years has been used. For the calculation of the deferred tax position of the entities in the United Kingdom and Germany, respectively, the applicable rates of 17% and 32%, respectively, for 2019 and for subsequent years have been used.

## Accounting policies

The deferred tax assets and deferred tax liabilities arise from temporary differences between the carrying amount of assets and liabilities in the financial reporting and their tax base. These are calculated on the basis of the tax rates that are expected to apply when the temporary differences are reversed, using tax rates enacted or substantively enacted as at the reporting date.

Deferred tax assets, including those deriving from tax loss carry-forwards, are measured if it is probable that sufficient tax profits will be available for setting off the losses and if possibilities for offsetting losses can be utilised.

Deferred tax assets and deferred tax liabilities are only netted if there is a formal netting right and the company intends to settle deferred tax positions simultaneously. Deferred tax positions are stated at nominal value.

## Section 3 Non-current assets and investments

### 11. Property, plant and equipment

(in millions of euros)	Land	Buildings	Other fixed installations	Rolling stock	Parts	Plant and equipment	Assets under construction	Total
<b>Composition as at 1 January 2018</b>								
Cost	156	780	153	6,315	97	603	780	8,884
Accumulated depreciation and impairments	32	331	116	4,071	68	421	-	5,039
<b>Carrying amount as at 1 January 2018</b>	<b>124</b>	<b>449</b>	<b>37</b>	<b>2,244</b>	<b>29</b>	<b>182</b>	<b>780</b>	<b>3,845</b>
<b>Changes in 2018</b>								
Investments							792	792
Capitalisations	1	65	17	510	1	71	-665	-
Acquisitions	-	-	-	-	-	-	-	-
Depreciation	-3	-26	-8	-220	-3	-31	-	-291
Exchange rate differences	-	-	-	-	-	-1	-	-1
Disposals	-4	-	-	-187	-	-3	-	-194
Impairments	-	-	-	-	-	-	-	-
Reversal of impairments	-	-	-	-	-	-	-	-
Other changes	1	-	-	-175	1	-	1	-172
<b>Total changes during the financial year</b>	<b>-5</b>	<b>39</b>	<b>9</b>	<b>-72</b>	<b>-1</b>	<b>36</b>	<b>128</b>	<b>134</b>
<b>Composition as at 31 December 2018</b>								
Cost	154	839	167	6,394	69	642	908	9,173
Accumulated depreciation and impairments	35	351	121	4,222	41	424	-	5,194
<b>Carrying amount as at 31 December 2018</b>	<b>119</b>	<b>488</b>	<b>46</b>	<b>2,172</b>	<b>28</b>	<b>218</b>	<b>908</b>	<b>3,979</b>
Adjustments due to application of IFRS 16	-31							-31
<b>Carrying amount as at 1 January 2019</b>	<b>88</b>	<b>488</b>	<b>46</b>	<b>2,172</b>	<b>28</b>	<b>218</b>	<b>908</b>	<b>3,948</b>
<b>Changes in 2019</b>								
Investments							635	635
Capitalisations	13	20	36	406	2	122	-599	-
Acquisitions	-	-	-	-	-	-	-	-
Depreciation	-3	-29	-9	-240	-3	-38	-	-322
Exchange rate differences	-	1	-	-	-	7	-	8
Disposals	-3	-1	-	-1	-	-10	-	-15
Impairments	-	-	-	-	-	-	-	-
Reversal of impairments	-	-	-	-	-	-	-	-
Other changes	-	13	-	-	-1	-11	5	6
<b>Total changes during the financial year</b>	<b>7</b>	<b>4</b>	<b>27</b>	<b>165</b>	<b>-2</b>	<b>70</b>	<b>41</b>	<b>312</b>
<b>Composition as at 31 December 2019</b>								
Cost	131	880	180	6,777	58	558	949	9,533
Accumulated depreciation and impairments	36	388	107	4,440	32	270	-	5,273
<b>Carrying amount as at 31 December 2019</b>	<b>95</b>	<b>492</b>	<b>73</b>	<b>2,337</b>	<b>26</b>	<b>288</b>	<b>949</b>	<b>4,260</b>

In 2018, equipment with a carrying amount of €185 million was sold to a third party and this equipment has been leased from that moment on (Traxxen). The result of this transaction is not material.

In 2018, other movements include the transfer of property, plant and equipment to the category held for sale for an amount of €174 million (see note 18; Disposal of Disa).

## Accounting policies

Property, plant and equipment are measured at cost, less accumulated depreciation and accumulated impairment losses. The cost of self-produced assets includes the cost of materials, direct labour costs, a reasonable portion of the indirect production costs and capitalised borrowing costs. Where relevant, the estimated costs of dismantling and removing the asset and the costs of restoring the site where the asset was located are added to the total cost.

Computer software that is an integral part of the computer equipment is capitalised as part of the equipment in question. Only assets where the Group has beneficial ownership are recognised in the balance sheet.

Gains and losses on the sale of an item of property, plant and equipment are determined by comparing the sales revenue with the carrying amount of the asset, and the net amount is then recognised under 'Other revenue' in the income statement.

### Components

If property, plant and equipment consist of components with differing useful lives, these components are listed as separate items under property, plant and equipment.

The carrying amount of an item of property, plant and equipment is adjusted for the cost of replacing all or part of that asset when such costs are incurred and if it is likely that the replacement will result in future economic benefits. All other costs of maintaining the asset are charged to the income statement when they are incurred.

### Depreciation

Depreciation of property, plant and equipment happens on a straight-line basis, after deducting the residual value and based on the estimated useful life of each individual item of property, plant and equipment. Depreciation is charged to the income statement.

Land is not depreciated, with the exception of street paving. The estimated useful life for different types of property, plant and equipment is as follows.

Asset type	Depreciation period
Buildings	broken down into components (15 to 100 years); average of 40 years
Other fixed installations	10 to 25 years
Trains	20 years
Buses	6 to 15 years
Plant and equipment	3 to 10 years

The specified useful life is an average for the assets concerned and for any components of which those assets consist. The depreciation method, remaining useful life and residual value are reviewed each year.

If a change in use causes an item of property, plant and equipment to be treated as investment property or if an investment property is intended for the company's own use, it is reclassified to 'investment property' or 'property, plant and equipment' respectively. Because both categories of non-current assets are measured in the same way, the reclassification is at the carrying amount.

## 12. Investment property

(in millions of euros)

**Total investment property**

### Composition as at 1 January 2018

Cost	304
Accumulated depreciation and impairments	-134
<b>Carrying amount as at 1 January 2018</b>	<b>170</b>

### Changes in 2018

Investments	-
Depreciation	-8
Disposals	-8
Impairments	-
Reversal of impairments	-
Other changes	-3
<b>Total changes during the financial year</b>	<b>-19</b>

### Composition as at 31 December 2018

Cost	282
Accumulated depreciation and impairments	-131
<b>Carrying amount as at 31 December 2018</b>	<b>151</b>

### Changes in 2019

Additions	2
Depreciation	-8
Disposals	-3
Impairments	-
Reversal of impairments	-
Other changes	-7
<b>Total changes during financial year</b>	<b>-16</b>

### Composition as at 31 December 2019

Cost	263
Accumulated depreciation and impairments	-128
<b>Carrying amount as at 31 December 2019</b>	<b>135</b>

In view of the nature, diversity and locations (station areas), the fair value of the investment property portfolio is not determined on a regular basis, unless impairment applies. The fair value is expected to exceed the carrying amount of the investment property.

In addition to business premises, investment property also consists of property let to third parties or held as strategic property. In addition, the Group also has property intended for its own use, recognised under property, plant and equipment. The rental arrangements generally include a period of several years during which cancellation is not possible. Extension of the arrangement will be negotiated with the lessee after this period. The overall contractual rent up to the end of the rental contracts was around €280 million as at 31 December 2019 (2018: €208 million). No contingent rent is charged.

The direct rental income was €35 million (2018: €30 million). The direct rental costs comprise maintenance costs, property taxes and direct management costs, totalling €7 million (2018: €7 million).

## Accounting policies

Investment property includes property held in order to earn rental income, an appreciation in value or both. Investment property is measured at cost, less accumulated depreciation and accumulated impairment losses. The cost of self-produced assets includes the cost of materials, direct labour costs, a reasonable portion of the indirect production costs and borrowing costs. Where relevant, the estimated costs of dismantling and removing the asset and the costs of restoring the site where the asset was located are added to the total cost.

The following accounting policies apply to investment property:

### Components

If investment property consists of components with differing useful lives, these components are listed as separate items under the investment property.

The carrying amount of an investment property is adjusted for the cost of replacing all or part of that asset when such costs are incurred and if it is likely that the replacement will result in future economic benefits. All other costs of maintaining the asset are charged to the income statement when they are incurred.

### Depreciation

Depreciation of investment property happens on a straight-line basis, after deducting the residual value and based on the estimated useful life of each individual item of investment property. Depreciation is charged to the income statement.

#### The estimated useful life for different types of investment property is as follows:

Asset type	Depreciation period
Foundations and underlying land	100 years
Structure and core	50 years
Facades and outer walls	33 years
Roofing	15 years
Interior finish	15 years
Technical equipment	15 years

The specified useful life is an average for the assets concerned and for any components of which those assets consist. The depreciation method, remaining useful life and residual value are reviewed each year.

## 13. Intangible assets

(in millions of euros)

	Goodwill	Software	Total
<b>Composition as at 1 January 2018</b>			
Cost	38	604	642
Accumulated amortisation and impairments	-	285	285
<b>Carrying amount as at 1 January 2018</b>	<b>38</b>	<b>319</b>	<b>357</b>
<b>Changes in 2018</b>			
Investments	-	117	117
Acquisitions	-	-	-
Depreciation	-	-62	-62
Disposals	-	-	-
Impairments	-	-	-
Reversal of impairments	-	-	-
Other changes	-	4	4
<b>Total changes during the financial year</b>	<b>-</b>	<b>59</b>	<b>59</b>
<b>Composition as at 31 December 2018</b>			
Cost	38	725	763
Accumulated amortisation and impairments	-	347	347
<b>Carrying amount as at 31 December 2018</b>	<b>38</b>	<b>378</b>	<b>416</b>
<b>Changes in 2019</b>			
Investments	-	136	136
Acquisitions	-	-	-
Depreciation	-	-71	-71
Disposals	-	-	-
Impairments	-	-	-
Reversal of impairments	-	-	-
Other changes	1	2	3
<b>Total changes during the financial year</b>	<b>1</b>	<b>67</b>	<b>68</b>
<b>Composition as at 31 December 2019</b>			
Cost	39	840	879
Accumulated amortisation and impairments	-	395	395
<b>Carrying amount as at 31 December 2019</b>	<b>39</b>	<b>445</b>	<b>484</b>

The remaining goodwill concerns our operations in the United Kingdom and Germany.



## Accounting policies

### Goodwill

All business combinations are accounted for using the acquisition method. Goodwill is the amount deriving from the acquisition of subsidiaries, associates and joint ventures. Goodwill is the difference between the cost of the acquisition and the fair value of the acquired identifiable assets and liabilities at the acquisition date. Goodwill is measured at cost less accumulated impairment.

Negative goodwill arising from an acquisition is taken directly to the income statement.

### Other intangible assets

Other intangible assets with a limited useful life acquired or produced by the Group are recognised at cost less accumulated amortisation and accumulated impairment losses.

After initial recognition, expenditure on capitalised intangible assets is only capitalised if it leads to an increase in the future economic benefits embodied in the specific asset involved. All other expenditure, including internally generated goodwill and trademarks, is charged to the income statement when it occurs.

Amortisation is charged to the income statement on a straight-line basis over the estimated useful lives of the intangible assets, with the exception of goodwill, from the date on which they become available for use. The estimated useful lives are as follows:

- Software 3-10 years
- Contracts: 5-10 years

## *14. Impairments of non-current assets or reversals of such impairments*

The cash flows that were used for determining the impairments are based on the business plans drawn up by the business unit concerned for a period of at least five years. A weighted average discount rate is determined for each cash-generating unit, in line with those for comparable companies. The calculations that give rise to the impairments and their reversals are based on a weighted average post-tax discount rate of 5% (2018: 5%),

### Assessment of impairments relating to Abellio

In view of the general economic climate, the challenges within the rail sector in the United Kingdom as well as in Germany and the lagging growth of passenger transport by rail in the United Kingdom, the Group identified indications of possible onerous contracts and asset impairments. As a result, NS performed analyses in line with the applicable rules.

Based on these analyses, it concluded that there were neither impairments nor onerous contracts as at 31 December 2019. The Group notes in this connection that the underlying analyses include significant estimation uncertainties.

There is a realistic risk that, in the future, significant impairments or provisions for onerous contracts will need to be recognised if the assumptions diverge individually or in the aggregate from the current best estimates.

The principal assumptions for the specific franchise contracts and assets are presented below.

### **Greater Anglia**

- the growth rates of income from passenger transport during the remaining contract term;
- future forecasts for the contractual mechanisms for employment in central London (CLE) and the gross domestic product (GDP) and the supplementary fees contractually arising from this;
- the successful implementation of performance optimisation programmes initiated during the remaining contract term, and their timing;
- non-termination of the franchise contract before the end of the remaining term (October 2025);
- the result of the financial settlements of various contractual provisions and negotiations with third parties, such as Network Rail; and
- the WACC applied.

In the context of Brexit, the Group is closely following the possibilities of disruptions of services, cost increases and possible restrictions on operations resulting from a no-deal Brexit. The Group will collaborate with major partners and suppliers to minimise the disruption of services.

### **ScotRail**

- the growth rates of income from passenger transport during the remaining contract term;
- the successful implementation of performance optimisation programmes initiated during the remaining contract term, and their timing;
- non-termination of the franchise contract before the end of the remaining term (March 2022);
- the result of the financial settlements of various contractual provisions and negotiations with third parties, such as Network Rail Scotland; and
- the WACC applied.

### **Abellio Germany**

- the implementation of specific contractual provisions to arrive at additional compensation from the various commissioning parties, mainly with regard to compensation of increased wage costs and penalties owing to worsened punctuality, the causes of which are beyond the carrier's control;
- the successful implementation of performance optimisation programmes initiated during the remaining contract term, and their timing;
- the successful introduction of new trains for the Stuttgarter Netz franchise;
- non-termination of the franchise contracts before the end of the remaining term; and
- the WACC applied.

Abellio Germany has been designated a single cash-generating unit for assessing goodwill. The assessment of whether the contracts are potentially onerous is performed for each individual contract.

## Accounting policies

The carrying amount of the Group's non-current assets is reviewed every reporting date in order to determine whether there are indications of impairment. If such indications are found, an estimate is made of the recoverable amount of the asset concerned. For goodwill and intangible assets that are not yet available for use, the recoverable amount is estimated at each reporting date.

The recoverable amount of an asset or a cash-generating unit is the higher of the value in use and the fair value less costs to sell. In assessing the value in use, the present value of the estimated future pre-tax cash flows is calculated using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets are grouped together into identifiable groups of assets that generate cash flows from continuing use and that are largely independent of other assets or groups of assets ('cash-generating units'). In impairment testing, the goodwill acquired in a business combination is allocated to the cash-generating units that are expected to benefit from the synergies of the combination.

An impairment loss is recognised if the carrying amount of an asset or the cash-generating unit to which it belongs exceeds its estimated recoverable amount. Impairment losses are recognised in the income statement. Impairment losses recognised in respect of cash-generating units are first deducted from the carrying amount of any goodwill allocated to the units, and then deducted from the carrying amount of the other assets in the unit or group of units on a pro rata basis.

Impairment losses in respect of goodwill are not reversed. In respect of other assets, impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

## 15. Investments accounted for using the equity method

Name of entity (in millions of euros)	Merseyrail Ltd	Other joint ventures	Total joint ventures	Other associates	Total
<b>Share percentage</b>	<b>50.00%</b>				
<b>2018</b>					
Current assets	50	8		17	
of which Cash and cash equivalents	38	7		7	
Non-current assets	5	-		6	
Current liabilities	42	4		9	
of which current financial liabilities	-	-		-	
Non-current liabilities	-	-		-	
of which non-current financial liabilities	-	-		-	
Net equity (based on 100%)	13	3		12	
<b>Carrying amount of investments accounted for using the equity method</b>	<b>8</b>	<b>2</b>	<b>10</b>	<b>7</b>	<b>17</b>
Revenue	183	7		34	
Depreciation, amortisation and impairments	2	-		3	
Result from operating activities	25	2		-	
Finance income	-	-		-	
Finance expense	-	-		-	
Income tax	4	-		-	
Profit for the reporting period	20	2		-	
Total comprehensive income for the reporting period	20	1		1	
<b>Share in result of investments accounted for using the equity method</b>	<b>11</b>	<b>3</b>	<b>14</b>	<b>-</b>	<b>14</b>
Share in other comprehensive income	-	-	-	-	-
<b>Share in total comprehensive income of investments accounted for using the equity method</b>	<b>11</b>	<b>3</b>	<b>14</b>	<b>-</b>	<b>14</b>
Dividend received	11	3	14	-	14

Name of entity (in millions of euros)	Merseyrail Ltd	Other joint ventures	Total joint ventures	Other associates	Total
<b>Share percentage</b>	<b>50.00%</b>				
<b>2019</b>					

Current assets	68	7	20		
of which Cash and cash equivalents	47	7	13		
Non-current assets	28	-	5		
Current liabilities	58	3	9		
of which current financial liabilities	1	-	-		
Non-current liabilities	21	-	-		
of which non-current financial liabilities	21	-	-		
		-			
Net equity (based on 100%)	16	3	13		
<b>Carrying amount of investments accounted for using the equity method</b>	<b>8</b>	<b>1</b>	<b>9</b>	<b>10</b>	<b>19</b>
Revenue	204	-	34		
Depreciation, amortisation and impairments	7	-	2		
Result from operating activities	29	-	-4		
Finance income	-	-	-		
Finance expense	-	-	-		
Income tax	6	-	-		
Profit for the reporting period	23	-	-4		
Total comprehensive income for the reporting period	23	-	-		
<b>Share in result of investments accounted for using the equity method</b>	<b>12</b>	<b>-</b>	<b>12</b>	<b>-4</b>	<b>8</b>
Share in other comprehensive income	-	-	-	-	-
<b>Share in total comprehensive income of investments accounted for using the equity method</b>	<b>12</b>	<b>-</b>	<b>12</b>	<b>-4</b>	<b>8</b>
Dividend received	9	-	9	-	9

The investments that are accounted for using the equity method have a carrying amount of €19 million (2018: €17 million). The financial information for these investments is as follows.

## Interests in joint ventures

### Merseyrail Services Holding Company Ltd

The Merseyrail franchise is operated under a 50:50 joint arrangement with Serco, a listed British company. NS and Serco have joint control, each with a 50% financial interest in the holding entity. The franchise is held by an independent entity in which the holding company concerned has a 100% interest. The profits of the holding company are distributed to NS and Serco in equal shares.

As regards the investments accounted for using the equity method, there are no material contingent assets and/or liabilities. As regards the valuation of the interests in the joint ventures, there are no significant estimates or assessments.

Pursuant to Sections 379 and 414 of Book 2 of the Dutch Civil Code, a complete list of the Group's subsidiaries, associates and joint ventures has been filed with the office of the Trade Register in Utrecht.

## Accounting policies

The Group's interests in investments accounted for using the equity method consist of interests in associates and joint ventures.

Associates are entities in which the Group has significant influence on the financial and operational policy, but which it does not control. A joint venture is an agreement through which the Group shares in the control and in which the Group has rights to the net assets of the arrangement rather than rights with respect to the assets and obligations with respect to the liabilities.

Associates and joint ventures over which control is exercised jointly are accounted for using the equity method and measured at cost upon initial recognition. The cost of the investment includes the transaction costs. After initial recognition, the consolidated financial statements include the Group's share in the total comprehensive income of the investments accounted for using the equity method, up to the date on which it ceases to exercise significant influence.

## Section 4 Working capital

### 16. Inventories

(in millions of euros)	31 December 2019	31 December 2018
Maintenance materials	146	141
Projects under construction, unsold	4	2
Trade goods	34	26
<b>Total</b>	<b>184</b>	<b>169</b>

The inventories of maintenance materials consist of raw materials and other materials for the production and maintenance of finished and semi-finished products for the maintenance centres. In 2019, the write-down of inventories to the net realisable value, which was recognised as an expense, amounted to €12 million (2018: €18 million). The accumulated impairment, after withdrawals, came to €98 million at the end of 2019 (2018: €104 million).

## Accounting policies

Inventories are stated at the lower of cost and net realisable value. The net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the costs to make the sale.

The cost of the inventories is based on the purchase prices or costs and includes expenses incurred in acquiring the inventories and the associated costs of purchase. The cost of inventories of finished products and work in progress includes a reasonable portion of the indirect costs based on normal production capacity.

## 17. Trade and other receivables

(in millions of euros)	31 December 2019	31 December 2018
Receivables from clients from work in progress	-	-
Trade receivables	445	305
Unbilled revenue	305	268
Other taxes and social security charges	86	42
Other receivables	308	215
<b>Total</b>	<b>1,144</b>	<b>830</b>

Trade and other receivables includes an amount of €3 million (2018: €8 million) relating to ProRail and the Dutch central government. The increase in trade and other receivables is mainly due to the start of the East Midland franchise in 2019 and increased receivables and account settlements with franchise authorities of Abellio.

Abellio ScotRail has an outstanding receivable in respect of Network Rail relating to the infrastructure works around Glasgow Queen Street Station in 2016, which still has an adverse impact on passenger numbers and revenue. Discussions are ongoing with Network Rail about the compensation to be received for lost revenues. Part of the compensation was already received in 2018. For the remaining compensation, Management recognised an estimate based on a calculation performed by an external party. As at 31 December 2019, Abellio ScotRail recorded a receivable for this, which involves significant estimation uncertainty due to the above.

The ageing of trade receivables as at the reporting date was as follows.

(in millions of euros)	31 December 2019		31 December 2018	
	Gross	Provided for	Gross	Provided for
Not past due	374	-	198	-
Past due 0-30 days	46	-	86	-
Past due 31-120 days	19	1	17	1
Past due 121-180 days	3	1	1	-
Past due 181-360 days	3	1	2	1
Past due more than one year	4	1	4	1
<b>Total</b>	<b>449</b>	<b>4</b>	<b>308</b>	<b>3</b>

### Impairment losses

Movements in the provision for impairments of trade receivables during the year were as follows:

(in millions of euros)	2019	2018
Balance as at 1 January	3	4
Additions	5	4
Use	-3	-3
Release	-1	-2
<b>Balance as at 31 December</b>	<b>4</b>	<b>3</b>

## Accounting policies

Trade and other receivables are stated at fair value plus any directly attributable transaction costs upon initial recognition. After initial recognition, they are recognised at amortised cost using the effective interest method.

The Group has formed a provision for impairment equal to the size of the estimated credit losses from trade and other receivables. The most important elements of this provision are a specific loss provision for significant individual positions and a group loss provision for groups of comparable assets concerning losses that are expected but have not yet been identified. The group loss provision is determined on the basis of historic payment data for comparable financial assets.

Provisions for trade receivables are made in the case of an impairment, unless the Group is certain that it will not be possible to recover the amount owed. In that case, the amount is considered irrecoverable and is written off directly against the financial asset concerned.

Construction contracts are stated at cost plus profit taken as at the balance sheet date, less a provision for anticipated losses and less progress billings. The cost encompasses all expenditure relating directly to specific projects and an attributable portion of the fixed and variable indirect costs incurred in connection with the contract activities, based on normal production capacity.

A receivable is created if the sum of the costs incurred (including the recognised profit or loss) exceeds the sum of the progress billings. If the sum of the costs incurred (including the recognised profit or loss) is less than the sum of the progress billings, the item is classified as a liability.

Contractual revenue and expenses arising from construction contracts are accounted for in the income statement in proportion to the stage of completion of the contract. The stage of completion is determined by ascertaining the costs of the work performed in relation to the total expected cost. As soon as the profit/loss can be reliably estimated, a proportionate part of the profit is credited to the income statement. Expected losses on contracts are recognised immediately and in full in the income statement.

## 18. Assets and liabilities held for sale

On 2 October 2018, the group resolved to dispose of the company DISA Assets Ltd and as from that date ceased to depreciate the assets in the company. The sale was completed in the course of 2019. Assets held for sale are measured at the carrying amount, as the fair value less costs to sell is not lower than this carrying amount.

The assets and liabilities held for sale as at 31 December 2018 comprised:

(in millions of euros)	31 December 2018
Property, plant and equipment	174
Trade and other receivables	13
Cash and cash equivalents	4
<b>Assets held for sale</b>	<b>191</b>
Interest rate swaps used for hedging	5
Trade and other liabilities	1
<b>Liabilities held for sale</b>	<b>6</b>



## 19. Cash and cash equivalents

(in millions of euros)	31 December 2019	31 December 2018
Cash and bank balances	818	906

The cash and bank balances are at the free disposal of the company, with the exception of €134 million (31 December 2018: €155 million). The amount that is not at the free disposal of the company relates to season ticket payments received in advance in the activities in the United Kingdom. The Group's interest rate risk and a sensitivity analysis for financial assets and liabilities are given in note 26.

### Accounting policies

Cash and cash equivalents are stated at fair value, which is normally the same as the nominal value.

## 20. Accruals and deferred income

Accruals and deferred income as at 31 December 2019 amounted to €32 million (31 December 2018: €42 million). The accruals include the non-current part of the outstanding pension contributions for employees amounting to €2 million (31 December 2018: €10 million) due to the pension agreement between the Railway Pensions Fund and NS, as explained in note 29. Over the coming years up to 2022, the item will be settled with the employees based on the discount with respect to the nominal contribution as laid down in the NS collective labour agreement.

## 21. Trade and other payables

(in millions of euros)	31 December 2019	31 December 2018
Advance payments received for work in progress	-	-
Trade payables	414	406
Current portion of deferred credits	40	40
Other taxes and social security charges	183	119
Other liabilities	400	484
Accrued expenses and deferred income	460	266
<b>Total</b>	<b>1,497</b>	<b>1,315</b>

Trade and other payables includes an amount of €6 million (2018: €9 million) relating to ProRail and the Dutch central government.

The Group's liquidity risk due to trade and other payables is stated in note 26. For more detailed information about the Advance payments received for work in progress item, see note 17.

## 22. Deferred income

The deferred income of €738 million (2018: €694 million) consists mainly of amounts for student public transport passes in the Netherlands received in advance and season ticket payments received in advance in the United Kingdom and the Netherlands.

## Accounting policies

This income concerns amounts received in a single payment under agreements with terms extending to future years. The income is credited to the income statement over the term of the agreements to which it relates. The income is measured at amortised cost.

## Section 5 Financing, financial risk management and financial instruments

### 23. Other non-current financial assets, including investments

(in millions of euros)	31 December 2019	31 December 2018	Accounting policy
<b>Other non-current financial assets</b>			
Share in Eurofima	88	81	Fair value through other comprehensive income – equity investment
Share in bonds	29	28	Fair value through other comprehensive income – investment in debt instruments
Loans and receivables	7	6	Amortised cost
Finance leases	33	41	Amortised cost
Commodity derivatives	2	2	Derivatives – fair value
Other non-current financial assets	-	1	Amortised cost
<b>Total</b>	<b>159</b>	<b>159</b>	
<b>Other current financial assets</b>			
Other non-current financial assets	8	-	Amortised cost
<b>Total</b>	<b>167</b>	<b>159</b>	

Deposits and bonds (included in Share in bonds) are held in part for the payment of the capital expenditure commitments of €1,312 million.

The interest in Eurofima is measured at fair value. The net asset value of this interest was used as the best approximation of fair value. This resulted in a revaluation of this interest as at 31 December 2019 by €7 million which was added to the fair value reserve.

## Accounting policies

On initial recognition, loans, receivables and deposits are accounted for by the Group from the date on which they first arose. All other financial assets are initially recognised on the transaction date. The Group derecognises a financial asset in the balance sheet once the contractual rights to the cash flows from the asset expire, or if the Group transfers the contractual rights to the cash flows from the financial asset by means of a transaction in which virtually all risks and rewards of ownership of the asset are transferred or not retained, and control of the asset transferred is not retained either. If the Group retains or creates an interest in the financial assets being transferred, that interest is recognised as a separate asset or liability.

The Group derecognises a financial liability if the contractual obligations have been discharged or cancelled or have expired. Financial assets and liabilities are offset and the resulting net amount is recognised in the balance sheet only if the Group has a legally enforceable right to set off the amounts and if it intends either to settle on a net basis or to realise the asset and settle the liability simultaneously. The Group uses the following financial instruments:

### Non-derivative financial instruments

Non-derivative financial instruments include investments in equity securities, deposits and bonds, trade and other receivables, cash and cash equivalents. Non-derivative financial instruments are initially recognised at fair value. After initial recognition, non-derivative financial instruments are measured as described below.

### Financial assets at fair value through profit or loss

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in the income statement.

### Financial assets at amortised cost

These assets are subsequently measured at amortised cost using the effective interest method. Amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairments are recognised in the income statement. Any gain or loss arising on derecognition is recognised in the income statement.

### Fair value through other comprehensive income – investments in debt instruments

These assets are subsequently measured at fair value. Interest income is calculated using the effective interest method, foreign exchange gains and losses and impairments are recognised in the income statement. Other net gains and losses are recognised in other comprehensive income. On derecognition, the gains and losses accumulated in other comprehensive income are reclassified to the income statement.

### Fair value through other comprehensive income – equity investment (interest in Eurofima)

These assets are subsequently measured at fair value. Dividends are recognised as income in the income statement, unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in other comprehensive income and are never reclassified to the income statement.

### Impairment of financial assets

At each reporting date, financial assets are assessed to determine whether there is objective evidence that they might be impaired on the basis of expected credit losses. A financial asset is deemed to be impaired if there is objective evidence that one or more events occurred that had a negative impact on the expected future cash flows of that asset.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between the carrying amount and the present value of the expected future cash flows, discounted at the original effective interest rate. An impairment loss in respect of investments 'at fair value through other comprehensive income' is calculated on the basis of the fair value.

Financial assets that are significant are individually tested for impairment. Other financial assets are assigned to groups with similar credit risk characteristics and are assessed collectively. All impairment losses are recognised as an expense in the income statement.

An impairment loss is reversed if the reversal can be objectively related to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost and fair value through other comprehensive income – investments in debt instruments, the reversal is credited to the income statement.

#### **Fair value versus the carrying amount**

The carrying amounts of the financial assets and liabilities recognised in the balance sheet do not differ materially from the fair values.

For bonds, the fair value is calculated using the available current market prices/closing prices. In principle, the interest in Eurofima is measured at fair value. The net asset value of this interest was used as the best approximation of fair value.

When determining the value of interest swaps and currency derivatives, the Group uses valuation techniques in which all significant data required are derived from observable market data (Level 2).

The Group's credit risks, currency risks and interest rate risks associated with the other investments are explained in more detail in note [26](#).

## *24. Equity*

See the consolidated statement of changes in equity for the movements in equity.

The authorised capital as at both 31 December 2019 and 31 December 2018 consisted of 4 million ordinary shares with a nominal value of €453.78 (originally NLG 1,000). There are 2,230,738 issued and fully paid up shares. All issued shares are held by the State of the Netherlands. The shareholders are entitled to a dividend, which is declared annually based on the resolution of the general meeting of shareholders regarding the profit appropriation. The shareholders have the right to cast one vote per share at meetings of the company.

The financial statements and the profit appropriation for 2018 were adopted in the shareholders' meeting of 18 March 2019. In accordance with the proposal, an amount of €69 million from the profit for the reporting period of €106 million was added to the reserves and an amount of €37 million was distributed as dividend.

## The movements in the other reserves were as follows:

(in millions of euros)	Reserve for translation differences	Hedging reserve	Fair value reserve	Actuarial reserve	Revaluation reserve for associates	Total other reserves
<b>Balance as at 31 December 2017</b>	<b>-14</b>	<b>-4</b>	<b>-</b>	<b>-</b>	<b>15</b>	<b>-3</b>
Adjustments due to application of IFRS 9			45			45
<b>Revised balance as at 1 January 2018</b>	<b>-14</b>	<b>-4</b>	<b>45</b>	<b>-</b>	<b>15</b>	<b>42</b>
Other comprehensive income	-	-3		-	-	-3
Other changes	-		-	-	-	-
<b>Balance as at 31 December 2018</b>	<b>-14</b>	<b>-7</b>	<b>45</b>	<b>-</b>	<b>15</b>	<b>39</b>
Adjustments due to application of IFRS 16					-2	-2
<b>Revised balance as at 1 January 2019</b>	<b>-14</b>	<b>-7</b>	<b>45</b>	<b>-</b>	<b>13</b>	<b>37</b>
Other comprehensive income	2	2	7	-	-	11
Other changes	-		-	-	-	-
<b>Balance as at 31 December 2019</b>	<b>-12</b>	<b>-5</b>	<b>52</b>	<b>-</b>	<b>13</b>	<b>48</b>

### Profit appropriation as stipulated by the Articles of Association

In accordance with Article 21, paragraph 2, of the Articles of Association of NV Nederlandse Spoorwegen, the Annual General Meeting of Shareholders decides on the appropriation of any positive balance in the income statement.

### Profit appropriation proposal

A proposal will be put to the Meeting to add an amount of €135 million of the net profit of €208 million to the general reserves and to distribute the remaining €73 million as dividend.

### Minority interests

Minority interests include minority interests as at 31 December 2019 in the equity of the group company Abellio Westmidlands Ltd.; this is not material.

## Accounting policies

### Translation reserve

The translation reserve consists of all exchange rate differences arising as a result of the translation of the financial statements of foreign operations and the translation of liabilities hedging the company's net investment in a foreign group company.

### Hedging reserve

The hedging reserve consists of the cumulative change in the fair value of hedging instruments (derivatives) where the hedged transaction has not yet taken place or the hedged position has not yet been settled.

### Fair value reserve

The fair value reserve consists of the cumulative change in the fair value of investments measured at fair value – other comprehensive income until the investment is derecognised.

### Actuarial reserve

The actuarial reserve relates to the actuarial gains and losses, which comprise the difference between the actual and projected changes in the pension liabilities and investment returns on pension assets (see note 29).

### Revaluation reserve for associates

The revaluation reserve for associates comprises the cumulative unrealised results, recognised directly in the equity of associates accounted for using the equity method.

### General reserve

The recognition in equity is after deduction of taxes. Dividends are recognised in the period in which the profit appropriation is decided upon and the dividends are declared.

## 25. Loans and other financial liabilities, including derivatives

This note contains information concerning the contractual provisions for the Group's interest-bearing loans and other financial liabilities that are measured at amortised cost.

(in millions of euros)	31 December 2019	31 December 2018
<b>Non-current liabilities</b>		
Private loans	600	652
Other financial liabilities	39	42
Currency derivatives	9	-
Commodity derivatives	8	2
<b>Total</b>	<b>656</b>	<b>696</b>
<b>Current liabilities</b>		
Private loans	58	72
Bank overdrafts	40	22
Commodity derivatives	1	2
<b>Total</b>	<b>99</b>	<b>96</b>
<b>Total liabilities</b>	<b>755</b>	<b>792</b>

The 'Private loans' item includes a debt payable by the Group to the Ministry of Infrastructure and Water Management of €148 million (2018: €180 million) associated with the deferred payments of franchise fees. Of that amount, €115 million has been included under 'Non-current liabilities', for the portion that is due to be paid after 2020. The portion that will be paid in 2020 (€33 million) is recognised in 'Current liabilities'. The interest rate is fixed at 3.027%. The terms and conditions of the loan were agreed in detail with effect from 1 January 2015 under the new main rail network franchise.

The other private loans have terms expiring between 2019 and 2029 and interest rates ranging from 0.8% to 1.5%.

The reconciliation of changes in liabilities resulting from financing activities is as follows:

(in millions of euros)	Private loans	Bank overdrafts	Other financial liabilities	Interest rate swaps used for hedging	Currency derivatives	Commodity derivatives	Lease liabilities	Total
<b>Balance as at 1 January 2018</b>	<b>646</b>	<b>19</b>	<b>48</b>	<b>2</b>		<b>4</b>	<b>33</b>	<b>752</b>
Dividend paid to shareholders	-		-	-		-		-
Repayment of borrowings	-431							-431
Addition of loans	504							504
<b>Total net cash flow from financing activities 2018</b>	<b>73</b>	<b>-</b>	<b>-</b>	<b>-</b>		<b>-</b>		<b>73</b>
Movements due to discounting	-		-					-
New finance leases							13	13
Movements in working capital		3						3
Other movements	5		-6	-2				-3
<b>Balance as at 31 December 2018</b>	<b>724</b>	<b>22</b>	<b>42</b>	<b>-</b>		<b>4</b>	<b>46</b>	<b>838</b>
Adjustments due to application of IFRS 16							1,604	1,604
<b>Carrying amount as at 1 January 2019</b>	<b>724</b>	<b>22</b>	<b>42</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>1,650</b>	<b>2,442</b>
Dividend paid to shareholders								
Repayment of borrowings	-454						-420	-874
Addition of loans	400							400
<b>Total net cash flow from financing activities 2019</b>	<b>-54</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-420</b>	<b>-474</b>
Movements due to discounting	-		-					-
New leases							826	826
Movements in working capital	-18	18						-
Currency differences							53	53
Other movements	6		-3		9	5		17
<b>Balance as at 31 December 2019</b>	<b>658</b>	<b>40</b>	<b>39</b>	<b>0</b>	<b>9</b>	<b>9</b>	<b>2,109</b>	<b>2,864</b>

## Accounting policies

### Non-derivative financial instruments

On initial recognition, these instruments are measured at fair value plus any directly attributable transaction costs. After initial recognition, loans and receivables are measured at amortised cost using the effective interest method.

### Derivative financial instruments (derivatives)

The Group holds derivatives to hedge its foreign currency, interest rate and commodity risks. On initial recognition, derivatives are measured at fair value, which is the same as the cost applicable on that date. Attributable transaction costs are charged to the income statement when they are incurred. After initial recognition, derivatives are measured at fair value and any changes are accounted for as described below.

### Hedge accounting

The method for recognition of the result depends on whether hedge accounting is used and, if so, whether the hedging relationship is effective. If the hedging relationship is effective, hedge accounting is used for these derivatives. When a hedging transaction is entered into, the hedging relationship is documented. Regular assessments are performed to determine if the hedging transaction was effective throughout the past period and whether the hedging transaction is expected to be effective throughout the coming period. If the hedging instrument expires, is sold, terminated or exercised or no longer meets the criteria for hedge accounting, application of hedge accounting ends with immediate effect.

### Cash flow hedges

If a derivative is classified as a hedge for variability in cash flows ensuing from a particular risk associated with a recognised asset or liability, or if a highly probable forecast transaction could affect profit or loss, the effective portion of the changes in the fair value of the derivative is recognised in other comprehensive income and presented in the hedging reserve in equity. Any ineffective portion of the changes in the fair value of the derivative is recognised directly in the income statement. The accumulated amount is reclassified to the income statement in the same period in which the hedged position affects the income statement.

### Fair value hedges

Changes in the fair value of a derivative hedging instrument that is classified as a fair value hedge are charged or credited to the income statement together with the changes in the fair value of the assets and liabilities (or groups thereof) insofar as they are attributable to the hedged risk.

If a hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, hedge accounting is discontinued prospectively. The cumulative gain or cumulative loss that was previously recognised in equity remains in equity until the forecast transaction has occurred. The amount recognised in equity is reclassified to the income statement (under net change in the fair value of the cash flow hedges reclassified from equity) in the same period in which the hedging instrument affects the income statement.

### Economic hedges

Hedge accounting is not applied to derivatives that are used as economic hedges of assets and liabilities denominated in foreign currencies. Changes in the fair value of such derivatives are recognised in the income statement as part of exchange rate gains and losses.

### Energy hedging

The Group uses accrual accounting for commodity derivatives intended for its own use, under the exception allowed by IAS 39.5 insofar as the requirements of IAS 39.5 are met. This is applicable to purchases of diesel and fuel oil and energy in the Netherlands and is discussed in the section on risks and in 'Off-balance sheet commitments'. The other commodity derivatives, which do not meet the criterion of being intended for the Group's own use, are measured at fair value, and hedge accounting is used where possible.



## 26. Financial instruments – Risk management and fair value

Because financial instruments are used, the Group is exposed to the following risks:

- market risks, consisting of:
  - interest rate risk;
  - currency risk;
  - energy price risk;
- credit risk;
- liquidity risk;
- insurance risks.

### Risk management framework

The Executive Board bears the final responsibility for the design and supervision of the Group's risk management framework. The Risk and Audit Committee and the Supervisory Board ensure that the risk management framework is adequate in view of the risks to which the Group is exposed. The Group's Risk and Audit Committee is supported in its supervisory role by NS Audit, NS Risk and the Group Control & Expertise department. NS Audit provides additional assurance concerning effective control of all NS business processes by performing regular and ad hoc evaluations. The findings of NS Audit are reported to the Risk and Audit Committee.

The Group's risk policy aims to identify and analyse the risks confronting the group, establish suitable risk limits and controls and monitor compliance with the limits. Policy and systems for financial risk management are regularly assessed and, where necessary, adjusted to allow for changes in market conditions and the Group's activities. Financial risk management is one element of the NS risk framework.

In order to ensure adequate risk management, additional policies have been defined for a number of business units. For instance, NS Insurance and Abellio have specific risk controls reflecting the nature of their activities, unlike the other business units, where Corporate Treasury determines the substance of the financial risk management.

The Group is involved in transport franchises abroad (the United Kingdom and Germany) through Abellio. These operations are primarily in the United Kingdom, mainly on an independent basis or with minority shareholders, and in part through a joint venture with the partner Serco, in which both partners have an equal share. Abellio's financial risk management is part of the Abellio risk framework and therefore the NS risk framework Agreements were reached in 2016 with the shareholder about the amount of the financial resources permitted to be involved in the Group's activities abroad.

### Market risks

Market risk is the risk that the Group's income and expenditure, or the value of investments in financial instruments, will be negatively affected by changes in market prices, such as commodity prices, currency exchange rates and interest rates. The management of market risk aims to keep the market risk position within acceptable limits while optimising return on investment. Market risk comprises three types of risk: interest rate risk, currency risk and price risk.

### Interest rate risk

The Group's policy is aimed at ensuring that at least 50% of the interest rate risk on borrowings is based on a fixed rate of interest. When determining the interest rate risk on borrowings, the Group can take account of the cash and cash equivalents available that can neutralise the interest rate risk of loans at variable rates. The Group uses derivatives such as interest rate swaps to limit the interest rate risks. Interest rate risks are predominantly managed centrally. Regulations and defined position limits apply to interest rate positions held with regard to foreign units within the Group. No speculative positions are held.

### Exposure to interest rate risks

The interest rate profile of the interest-bearing financial instruments is as follows:

(in millions of euros)	31 December 2019	31 December 2018
<b>Liabilities with a variable interest rate</b>		
Financial liabilities	-	-
Effect of interest rate swaps	-	-
	-	-
<b>Liabilities with a fixed interest rate</b>		
Financial liabilities	761	830
Lease liabilities	2,109	-
Effect of interest rate swaps	-	-
	<b>2,870</b>	<b>830</b>
<b>Financial assets</b>		
Financial assets with a fixed interest rate	62	74
Financial assets with a variable interest rate (especially cash and cash equivalents)	818	906

In 2016, the Group concluded a number of forward starting interest rate swaps to hedge the interest rate risk of future financing of rolling stock for a foreign franchise (cash flow hedge accounting). The entity in which these forward contracts were recognised was disposed of in 2019. As at 31 December 2018, these forward starting swaps were included in Liabilities held for sale (note 18).

The Group has no floating rate GBP financial liabilities, so any potential changes in interest rates due to Brexit have no impact on the Group.

### Currency risk

The Group is exposed to currency risks on purchases, trading activities, cash and cash equivalents, borrowings, other balance sheet positions and off-balance sheet commitments denominated in currencies other than the euro. Because of its business activities, the Group mainly has currency positions in pounds sterling (GBP) and Swiss francs (CHF).

The risk of fluctuations in exchange rates is hedged using forward exchange contracts, spot and/or forward purchases and sales and swaps, thereby hedging one or more of the risks to which the primary financial instruments are exposed. Purchases and sales, investment and financing commitments and settling accounts with foreign railway companies mainly take place using the functional currencies of the Group's business units, namely euros (EUR) and pounds sterling (GBP).

The currency risk of participating interests denoted in a foreign currency (pounds sterling and Swiss francs) is not hedged. The currency risks relating to translation differences in both the underlying balance sheet items and the value of the participating interests if the functional currency is not the euro are only hedged if the Group expects to discontinue operations. The foreign exchange gains or losses for the regular balance sheet items in the value of the participating interest are recognised in equity through the legal reserve for exchange differences.

At the end of 2019 and 2018, no materially significant positions were held in currencies other than the functional currency of the business units concerned.

At the end of 2019, the Group entered into a number of forward contracts and currency swaps in order to hedge specific currency positions. The nominal value of the hedged positions as at the end of 2019 was €252 million (year-end 2018: €181 million). The fair value of these currency derivatives at the end of 2019 was €9 million (2018: €1 million positive).

### **Brexit**

Following the British parliament's inability to break through the impasse on the Brexit process, an early general election was held in December 2019, which was won by the Conservative Party by a substantial majority. After the election, the government passed legislation to ensure that the United Kingdom will formally leave the European Union with a withdrawal agreement on 31 January 2020. During the ensuing transition period, which is expected to continue until 31 December 2020, Great Britain will effectively remain in the EU's customs union and the internal market but be outside the political institutions, and there will be no British members of the European Parliament.

The government's negotiators have the rest of 2020 to reach and ratify a trade agreement with the EU, after which the United Kingdom will either enter into a new relationship with the EU or exit the transition period without a trade agreement, in which case the United Kingdom will have to pay rates for imports to the EU.

Abellio UK is only active in the United Kingdom and does not offer any cross-border passenger rail services. All necessary operating licences (such as licences of the ORR, homologation of trains) are available and will continue to exist. From a legal perspective, Brexit has no direct impact on Abellio UK's activities and a 'No-Deal' situation will not affect the necessary licences.

The British pound sterling (GBP) has depreciated in value since the Brexit vote, from 1.31 in June 2016 versus the euro, to 1.18 at year-end 2019, a decrease of 10%. Abellio UK has no material exposure to foreign currencies, so the only effect is the translation risk for NS. This translation risk has an impact on the translation into euros of the capital invested, the balance sheet items and results.

Brexit may have consequences for the swift import of new trains and spare parts and cause a decrease in economic growth that impacts passenger revenues and profitability. In the case of a no-deal Brexit at the end of 2020, economic growth could decline further. Contractual and other measures have been taken to limit the risks. Abellio UK is confident that it will achieve its ambitions despite the consequences of the Brexit, although a no-deal Brexit may impede revenue growth and will impact Abellio UK's results.

### ***Sensitivity analysis for foreign currencies***

Given that no materially significant items in financial instruments were held in foreign currencies at the end of 2019 or the end of 2018, a change in the value of the euro with respect to a foreign currency at the end of the year will not have any material impact on equity and profits over the reporting period.

### **Energy price risk**

#### ***The Netherlands***

The Group is affected by market fluctuations in the price of energy. In 2014, the Group signed a ten-year contract (2014-2024) with Eneco for the supply of 'green' traction electricity for the rolling stock fleet in the Netherlands. From 2015 onwards, 50% of the trains in the Netherlands ran on 'green' electricity. Since 2017, the Group's traction has been entirely green. The contract covers the following risks (in whole or in part):

- Price risk: the fees for the Programme for Responsibility and Guaranteed Origins are fixed for the entire contractual period. The contract offers the option of purchasing the requisite electricity for future years based on a hedging strategy, which limits the exposure to market prices.
- Credit risk: the credit risk is limited to the thresholds that depend on the credit rating. If the exposure (which allows for aspects such as the difference between market values and contract values of electricity covered using a hedging strategy) exceeds a certain threshold (that depends on the credit rating), the Group or Eneco must give the other party guarantees or provide cash collateral.
- Volume risk: the volume risk is limited because the volume for the previous year is given as the volume required in each new year. In addition, a range also applies in the year in question, within which fluctuations in the volume consumed do not affect the price.

The contract complies with the 'own use' criteria and is not classified as a derivative.

#### ***The United Kingdom***

Abellio has entered into fuel hedging contracts for a number of subsidiaries to partially hedge movements in fuel prices and the associated currency risks. To this end, monthly forward contracts are used for a proportion of its fuel costs for a future period (ranging from 2019 to 2022) in order to cover the risks relating to the fuel costs and the associated currency risks. The guarantees given with these hedging contracts are specified in note 32.

### ***Sensitivity of commodity (fuel) derivatives***

The sensitivity of the commodity derivatives with a carrying amount as at 31 December 2019 of €5 million negative (31 December 2018: €2 million negative) is as follows: a rise of €0.10 in the fuel price would cause a reduction in the negative value of the commodity derivatives of approximately €37 million (31 December 2018: €15 million) and equity would increase by €31 million (31 December 2018: €12 million). If the fuel price were to fall, an opposite effect would be seen.

### **Credit risk**

Credit risk is the risk of financial loss by the Group if a customer or counterparty to a financial instrument does not meet its contractual obligations. Credit risks mainly arise from receivables from customers and from investments. There was no significant concentration of credit risks as at the balance sheet date.

The carrying amounts of the financial assets represent the maximum credit risk. For details of the credit risk regarding Eurofima, see note 32. The maximum exposure to credit risk at the reporting date was as follows:

(in millions of euros)	Note	31 December 2019	31 December 2018
Share in Eurofima	23	88	81
Share in bonds	23	29	28
Loans and receivables	23	7	6
Finance leases	23	33	41
Commodity derivatives	23	2	2
Other non-current financial assets	23	-	1
Trade and other receivables	17	753	520
Cash and cash equivalents	19	818	906
<b>Total</b>		<b>1,730</b>	<b>1,585</b>

### **Investments**

The Group limits its credit risk in its investments by only investing with other parties that comply with the policy drawn up by the Group. Regular checks are performed to establish whether the contractual parties still comply with the policy or whether further action is needed.

Given the creditworthiness of the counterparties, the Group expects that those counterparties will fulfil their obligations. No impairment losses were incurred on the investments, bonds and deposits in 2019 or 2018. Investments are in principle made in counterparties with a long-term credit rating of at least A- from Standard & Poor's and a long-term credit rating of at least A3 from Moody's, or in a number of Dutch municipalities. If a counterparty only has a single credit rating, it must satisfy Standard & Poor's or Moody's rating requirements as stated above. Investments that no longer comply with this policy are either permissible as exceptions and monitored frequently or reduced (generally through normal progression), which may persist for some time after the balance sheet date. The Group's foreign companies do not have significant long-term material cash surpluses, unless this is the result of their normal business activities (monies received in advance).

### **Trade and other receivables**

The Group's credit risk relating to trade and other receivables is mainly determined by the individual characteristics of the separate customers. The demographic features of the customer base, including the risk of non-payment in the sector and the country in which the customers are active, have less impact on the credit risk. About 8% (2018: 9%) of the Group's revenues are from sales transactions with the Dutch Education Executive Agency (DUO). As part of the credit policy applied by the business units, the individual creditworthiness of each new customer is assessed before standard payment and delivery conditions are offered to the customer. In the case of contract renewals, figures from the business unit's own experience are also used in assessing creditworthiness. In the assessment of the credit risk, customers are divided into groups based on credit characteristics; these groups include government, companies, private individuals and customers with possible financial problems in the past. Deliveries to customers with a high risk profile are only made after approval by the Executive Board. Business has been conducted with the majority of customers for many years, with only occasional (non-material) losses having been incurred.

### Liquidity risk

The liquidity risk is the risk that the Group will have difficulty meeting its obligations. Based on the principles underlying liquidity risk management, sufficient liquid assets must be retained, as far as possible, to be able to meet the current and future financial obligations in the short term, under both normal and difficult circumstances, without any unacceptable risks being incurred or the Group's reputation being jeopardised. The risk that the Group cannot meet its financial obligations is limited, as the Group has sufficient cash or assets that are readily convertible into cash. The Group also has committed credit facilities including €100 million up to December 2020 and €350 million up to June 2021, plus a standing committed credit facility of €345 million available until May 2023.

At the end of 2019, cash and cash equivalents and assets that can be readily converted into cash (trade and other receivables) comprised €1,985 million (2018: €1,738 million). The contractual financial obligations due within one year totalled €1,401 million (2018: €994 million).

The Group manages the cash and cash equivalents on the basis of regular liquidity forecasts using a bottom-up approach. On the basis of this forecast, financing limits are set for the business units that are clients of Corporate Treasury's in-house bank. The bank monitors these limits and they cannot be exceeded unless authorisation has been obtained. This gives Corporate Treasury an early warning system. The liquidity forecast and the aforementioned financing limits let Corporate Treasury manage the cash and cash equivalents by lending and withdrawing funds.

The following table shows the contractual maturities of the financial liabilities, including the estimated interest payments. The sums are gross amounts and have not been discounted.

	31 December 2018						
(in millions of euros)	Carrying amount	Contractual cash flows	< 6 months	6-12 months	1-2 years	2-5 years	> 5 years
<b>Non-derivative financial liabilities</b>							
Private loans	724	724	21	50	58	196	399
Finance lease liabilities	46	46	1	1	3	6	35
Bank overdrafts	22	22		19			
Other financial liabilities	42	42	-	-	-	-	42
Trade and other payables	895	895	895	-	-	-	-
<b>Derivative financial liabilities</b>							
Interest rate swaps used for cash flow hedging	5	5	5		-	-	-
Commodity derivatives	4	5	1	1	3	-	-
<b>Total</b>	<b>1,738</b>	<b>1,739</b>	<b>923</b>	<b>71</b>	<b>64</b>	<b>202</b>	<b>476</b>

	31 December 2019						
(in millions of euros)	Carrying amount	Contractual cash flows	< 6 months	6-12 months	1-2 years	2-5 years	> 5 years
<b>Non-derivative financial liabilities</b>							
Private loans	658	655	22	37	95	135	366
Lease liabilities	2,109	2,372	242	242	431	691	1,008
Bank overdrafts	40	40	40				
Other financial liabilities	39	39	-	-	-	-	39
Trade and other payables	814	814	814	-	-	-	-
<b>Derivative financial liabilities</b>							
Currency derivatives	9	9	5	4			
Commodity derivatives	9	9	2	2	2	1	2
<b>Total</b>	<b>3,678</b>	<b>3,938</b>	<b>1,125</b>	<b>285</b>	<b>528</b>	<b>827</b>	<b>1,415</b>

The above items have been netted off, because the contract requires the hedging transactions to be settled on a net basis. When calculating the future cash flows, it is assumed that the future variable interest rates are the same as the last known variable interest rates.

As regards the risks relating to capital, the Group has agreed a dividend policy with the shareholder.

## Insurance risks

In the course of its operational activities, the Group is exposed to risks that can be insured against. Risks beyond the scope of the business units are managed via the subsidiary NS Insurance. This refers to the risk of losses due to collisions, fire and liability as well as direct trading loss. The maximum extent of these losses is calculated by external specialists once every three years, or more often if changed circumstances make this necessary. The subsidiary, NS Insurance, insures the above risks for the business units. It does not insure third parties. If the total claims burden in any year exceeds NS Insurance's own internal cover, the additional cover required is provided by reinsurance. The Group's loss claims are paid from the premium income and investment income of NS Insurance. If the total costs including the claims burden exceed the revenue, these costs are paid from the distributable reserve of NS Insurance (if this is sufficient).

NS Insurance uses stop-loss reinsurance contracts for reinsurance. MPL (maximum possible loss) studies are carried out regularly to determine limits for the insurance. Provided market conditions allow, NS Insurance only takes out reinsurance with parties that have at least an A- rating. If the rating drops below A-, it has the option of cancelling the reinsurance agreement. This has as yet never happened. The reinsurers of NS Insurance had ratings of at least A- as at the end of 2019.

NS Insurance is an insurance company and is supervised by De Nederlandsche Bank and the Netherlands Authority for the Financial Markets (AFM). Insurers must hold sufficient capital reserves to satisfy the minimum solvency requirement of Solvency II (SCR, the Solvency Capital Requirement). Insurers are also required to determine their own standard solvency requirement. NS Insurance has determined its standard solvency requirement in such a way that it will still be able to satisfy the SCR even if the stress scenario arises. Its standard solvency requirement is €48 million. NS Insurance comfortably meets this requirement. NS Insurance is fully consolidated in the Group figures.

## 27. Net financing result

(in millions of euros)	2019	2018
Interest income from financial assets	3	1
Interest income from deposits and bank balances	-	-
Exchange differences	-	-
Other interest income	9	5
<b>Finance income</b>	<b>12</b>	<b>6</b>
Interest expense on financial liabilities measured at amortised cost	-14	-11
Interest expense on lease liabilities	-37	-
Exchange differences	-3	-1
Interest expense from discounting of provisions/other employee benefits	-1	-1
Other financial expenses	-8	-7
<b>Finance expense</b>	<b>-63</b>	<b>-20</b>
<b>Net finance result included in the income statement</b>	<b>-51</b>	<b>-14</b>



## Accounting policies

Finance income includes the interest income from monies invested, lease income, gains from the sale of available-for-sale financial assets and gains on hedging instruments that are recognised in the income statement. Interest income is recognised in the income statement as it accrues, using the effective interest method. Dividend income is recognised in the income statement when the right to the dividend payment is established.

Finance expenses include the interest expenses on borrowings, lease contracts, interest accrual on provisions and losses on hedging instruments that are recognised in the income statement. All borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in the income statement using the effective interest method. No borrowing costs were capitalised in 2018 or 2019.

Financial benefits released from cross-border lease arrangements are deducted from the interest expense. Exchange rate gains and losses are included in the finance income and expense respectively.

## Section 6 Other disclosures

### 28. Deferred credits

(in millions of euros)	31 December 2019	31 December 2018
Lump sum payments	182	206
Adjustment mechanism for franchise fee	98	109
<b>Deferred credits</b>	<b>280</b>	<b>315</b>
Less: current	-40	-40
<b>Total non-current as at 31 December</b>	<b>240</b>	<b>275</b>

The lump-sum payment for wage increases resulting from making the Railway Pensions Fund independent in 1994 is expected to be released up to 2035, and to be credited to the income statement. The franchise fee adjustment mechanism is included in the implementation agreement for the main rail network franchise (see note 32). The amounts will be released in equal instalments and be credited to the income statement during the term of the franchise up to and including 2024.

## Accounting policies

This income concerns amounts received in a single payment under agreements with terms extending to future years. The income is credited to the income statement over the term of the agreements to which the income relates. The income is measured at amortised cost.

### 29. Employee benefits

The non-current employee benefits comprise:

- other long-term employee benefits, including long-service awards;
- obligations resulting from occupational disability and supplements to social security payments;
- obligations relating to defined benefit plans.

(in millions of euros)	31 December 2019	31 December 2018
Defined benefit plans	3	1
Other long-term employee benefits	32	29
<b>Total</b>	<b>35</b>	<b>30</b>

## Pension liabilities

The staff of the NS Group companies are covered by the pension plans of the following pension funds. The table also shows the numbers of active members.

(numbers)	31 December 2019	31 December 2018
Railway Pensions Fund	16,878	17,070
Hotel & Catering industry pension fund	1,558	2,360
Food business industry pension fund	981	887
Servex supplementary pension plan	49	108
ScotRail	4,713	4,874
East Anglia/Greater Anglia	1,702	1,702
Abellio Transport Holdings	24	24
Abellio London & Surrey	2,113	1,958
Abellio West Midlands	2,475	2,475

In all cases where an employee is a member of an industry pension fund, the NS Group companies have no obligation to pay supplementary contributions in the event of a deficit in that industry pension fund, other than payment of future contributions. Equally, the NS Group companies have no claim to any surpluses in the funds. Consequently, these defined benefit pension plans are accounted for in these financial statements as defined contribution plans, in accordance with IFRS.

The total amount of the pension contributions charged to the income statement in 2019 was €141 million (2018: €139 million).

## Railway Pensions Fund (defined contribution plan)

The pension plan for the railway industry is administered by the Railway Pensions Fund (*Spoorwegpensioenfond*s, SPF). The plan qualifies for recognition in the financial statements as a defined contribution plan. The contribution agreed with SPF is a fixed annual contribution agreed in advance and expressed as a percentage of the pensionable earnings. In 2019, NS paid the nominal pension contribution of 24% to the pension fund. Two-thirds of the pension contributions paid to SPF are paid by the company and one-third is paid by the employees. After payment of the agreed contribution, the company has no obligation to pay additional amounts should there be a deficit in the pension fund. The actuarial risks and investment risks are borne by the pension fund and its members. The pension costs up to 2035 are partly offset by the release of the lump-sum payment for wage increases (see note 28).

At the end of 2015, the Group made new agreements with the pension fund for dealing with the contribution build-up that came into effect on 1 January 2017. This led to a receivable from SPF of about €240 million that was received in two years (2016 and 2017). The employees' part of the contribution build-up (one third of the amount) is recognised as a debt and will be settled with the employees over the next few years up to and including 2022. The employer's part of the contribution build-up (two thirds of the amount) has been added to the lump-sum payment for wage increases and will be credited to the pension costs up to 2035.

There is a defined contribution plan for Abellio London & Surrey and the Servex supplementary pension plan.

## Defined benefit plans

Abellio Greater Anglia, Abellio ScotRail, Abellio West Midlands and Abellio Transport Holdings have arranged for pensions for their staff to be administered by the UK Railways Pension Scheme. The fund in question can be considered as a company pension fund and the pension plan as a defined benefit plan.

Every company is a designated employer for one or more cost-sharing agreements within the Railways Pension Scheme. Such cost-sharing agreements are geared to a lifelong pension. The amount of the pension depends on how long an employee was an active member of the pension plan and on their salary when leaving the plan (final salary plan).

Because of the nature of the cost-sharing agreements, the amounts payable to cover both the costs of the accrued pension entitlements and any shortfall between the value of the assets and the value of the pension liabilities are borne jointly by the employer and the contributing members in a ratio of 60% to 40% respectively. As a consequence, the employer recognises 60% of the total pension costs and pension liabilities in the balance sheet. The Railways Pension Scheme is administered by the Trustee, the Railways Pension Trustee Company Limited. The plans' assets are invested via investment funds, each with a different risk and return profile.

### Change in accounting policies relating to defined benefit pension plans in the United Kingdom

In the 2018 financial statements, the Group changed the way it accounts for defined benefit railway pension schemes in the United Kingdom. In the current franchise agreements, it has been agreed that the franchisee is only responsible for agreed contributions over the period of the franchise. When the franchise has ended, all rights and obligations with regard to the employees will be transferred to the new franchisee.

Therefore, only the portion of the surplus or deficit relating to the pension plan that is expected to be realised during the term of the franchise based on the assumptions and agreements on the balance sheet date is recognised in the Group balance sheet. As a result, on 31 December 2018 and 31 December 2017, no net surplus or deficit was recognised with regard to these railway pension schemes in the balance sheet. This approach is unchanged in comparison to previous years.

The Group has, however, changed the accounting policies for the pension costs in the income statement. From now on, only the costs that are expected to be borne by the franchisee (the Group) during the term of the franchise are recorded in the income statement. These net pension costs are therefore calculated while taking into account that part of the costs that will be borne by the employees (40%) and by other parties after the end of the current term of the franchise. This net calculation also takes into account any allocation within the term of the franchise that may possibly occur in connection with the triennial assessments during the term of the franchise, as well as any adjustments to the annual contributions over the term of the franchise.

Up to and including the 2017 financial year, the IAS 19 service costs were recognised in the income statement, taking into account only the part of the costs to be borne by the employees. The portion of the costs to be borne by other parties after the current term of the franchise ends was recognised as part of the 'unrealised actuarial gains and losses'. The adjusted accounting policy for this railway pension plan provides a better insight into the share of the costs actually borne by the Group in the various franchises. This amendment also ties in with the corresponding change that a number of other franchisees in the United Kingdom have made in recent years.

The change in this accounting policy was also implemented in the measurement of the Group's interest in the joint venture Merseyrail Ltd.

The pension liabilities and the pension assets are based on actuarial calculations that were performed as at 31 December. At year-end 2019, the net liabilities of Abellio Transport Holdings Limited were €3 million (year-end 2018: €1 million). The average term for the pension liabilities is about 24 years.

To reflect the nature of the franchise, the shortfalls between the pension liabilities and the pension assets for Abellio Greater Anglia, Abellio ScotRail and Abellio West Midlands have been included in 'Non-current liabilities' to the extent that they concern the term of the franchise. The remaining amount at the end of the term of the franchise is not recognised in the balance sheet because it will constitute part of the debts of the next franchise holder. At year-end 2019, the net liabilities were nil (year-end 2018: nil). The average term for both pension liabilities is about 20 years. When determining the pension costs in the profit and loss account, account is also taken of the portion of the pension costs that are not borne by the current franchise holder, but will be borne by other parties after the current term of the franchise ends.

#### Basic assumptions for defined benefit plans

The following assumptions were used for determining the pension liabilities and the pension assets (based on a weighted average):

	<b>31 December 2019</b>	<b>31 December 2018</b>
Discount rate	2.2%	3.2%
Total wage increase	2.2%	2.7%
Increase of pension benefits	1.9%	2.1%
Inflation	1.9%	2.1%

Mortality table: S1NA tables with CMI 2018 projections plus long-term expectation of +1.25%.

## Breakdown

The breakdown of the pension liabilities is as follows.

(in millions of euros)	31 December 2019	31 December 2018
Fair value of plan assets	2,727	1,819
Present value of defined benefit obligations	3,764	2,335
<b>Deficit</b>	<b>1,037</b>	<b>516</b>
Employees' share	-415	-206
Deficit at the end of the franchise period	-619	-309
Write-down of pension surplus	-	-
<b>Group's net commitments concerning franchise period</b>	<b>3</b>	<b>1</b>

## Sensitivity analysis

Reasonably likely changes in one of the relevant actuarial assumptions on the balance-sheet date, while keeping all other assumptions constant, would have the following effect on the gross liability pursuant to the defined benefit entitlements.

(adjustment by 0.25%) (in millions of euros)	Increase	Decrease
Discount rate	-213	227
Inflation	227	-214
Future salary increases	63	-61

A change in life expectancy of one year would lead to a change in the gross liability of about €95 million (31 December 2018: €61 million). The impact of these changes on the Group's net liabilities during the term of the franchise is expected to be limited, given the transfer of liabilities at the end of the franchise.

## Movement

The changes in the pension assets and liabilities are as follows.

(in millions of euros)	2019	2018
<b>Plan assets as at 1 January</b>	<b>1,820</b>	<b>1,829</b>
Addition of new fund	479	-
Interest income	65	53
Pension contributions (including employees' share)	65	53
Pension benefits paid	-56	-38
Administration expenses	-10	-8
Return on plan assets, excluding interest income	252	-50
Exchange results	112	-19
<b>Plan assets as at 31 December</b>	<b>2,727</b>	<b>1,820</b>

<b>Defined benefit obligations as at 1 January</b>	<b>2,338</b>	<b>2,401</b>
Addition of new fund	679	-
Pension costs	118	99
Interest expenses	84	68
Pension benefits paid	-56	-38
Net actuarial gain or loss	459	-167
Exchange results	142	-25
<b>Defined benefit obligations as at 31 December</b>	<b>3,764</b>	<b>2,338</b>

### Breakdown of pension assets

The breakdown of the pension assets is as follows.

(in millions of euros)	31 December 2019	31 December 2018
Shares	1,791	1,107
Fixed-income securities	181	375
Property	252	169
Cash	349	107
Other	154	62
<b>Total</b>	<b>2,727</b>	<b>1,820</b>

### Pension costs recognised in the income statement

(in millions of euros)	2019	2018
Pension costs (employer's share)	71	61
Interest expenses	-	-
Administration expenses	6	4
Adjustment due to limitation of franchise period	-37	-33
<b>Total</b>	<b>40</b>	<b>32</b>

## Unrealised actuarial gains and losses

(in millions of euros)	2019	2018
Net actuarial gain or loss due to:		
- Demographic assumptions	20	62
- Financial assumptions	-520	108
- Experience adjustments	-	-
Return on plan assets, excluding interest income	239	-50
Adjustment due to limitation of franchise period	140	-73
Changes in members' share	121	-47
<b>Total</b>	<b>-</b>	<b>-</b>

Based on current accounting policies, the Group expects to recognise pension costs for Abellio of €44 million for the above defined benefit plans in 2020.

## Other long-term employee benefits

This includes long-service award obligations. The AG2018 mortality table is used for the calculation of the long-service award obligations.

The changes in the provision were as follows.

(in millions of euros)	2019	2018
<b>Long-service award obligation as at 1 January</b>	<b>29</b>	<b>28</b>
Payments	-2	-2
Actuarial gains and losses	2	1
Accrued interest	3	2
<b>Long-service award obligation as at 31 December</b>	<b>32</b>	<b>29</b>

The current portion of this provision is €2 million.

The sensitivities are as follows.

	2019	2018
Discounting (-0.5%)	4.8%	4.5%
Total wage increase (0.5%)	4.7%	4.2%
Career opportunities (+25%)	3.2%	3.0%
Probability of resignation/dismissal (+25%)	-5.3%	-4.9%

## Accounting policies

'Employee benefits' includes pension liabilities for pension plans and other obligations relating to employee benefits, consisting of long-service awards, early retirement payments and obligations due to employees' occupational disability.

Defined contribution plans are plans under which the Group has no obligations other than to pay the contractual contributions. These contributions are recognised in the income statement in the period for which the contribution is payable.

Defined benefit plans are those plans in which the Group's obligations extend beyond payment of the mandatory, contractually agreed contribution to pension funds or insurance companies. The Group's net liability is determined individually for each plan by estimating the pension entitlements that employees have accrued in the reporting period and the preceding years. The present value of these pension entitlements is determined and netted off against the fair value of the invested pension assets. The discount rate is the interest rate as at the balance sheet date for high-grade fixed income securities for which the term to maturity is approximately the same as that of the pension liabilities. The calculation takes account of elements such as future wage increases resulting from general developments in wage levels and career opportunities, inflation and current life expectancies. The calculation is performed annually by a qualified actuary using the projected unit credit method. If the calculation results in a benefit to the Group, the recognised asset cannot exceed the net value of any unrecognised past-service pension costs and the present value of any future refunds from the plan or reductions in future contributions to the plan. The employee's portion is deducted from the liability.

The pension liabilities relating to the Group business units that are based in the United Kingdom have been included for the period during which the transport franchises operate.

The change in pension liabilities and investment returns anticipated at the start of the year, based on the actuarial calculations, is included as a change in the net liabilities and recognised in the income statement. Contributions paid by employers and employees are deducted from the net liabilities. The actuarial gains and losses, which comprise the difference between the actual and anticipated changes in the pension liabilities and investment returns, are recognised in other comprehensive income.

Liabilities relating to long-service awards and early retirement are calculated actuarially and recognised at the present value. This takes account of developments in wages and prices, recent mortality tables and estimates of the employment contract. Any actuarial gains or losses are recognised in the income statement in the period in which they occur. The liabilities due to occupational disability are determined in a similar fashion.

### Short-term employee benefits

Any entitlements to time off that have not been taken are converted to the present value, taking account of future salary increases. Other short-term employee benefits are measured without being converted to the present values and recognised when the service associated with them is rendered.



## 30. Provisions

(in millions of euros)	Provisions for reorganisation costs	Provision for soil remediation	Other provisions	Total
<b>Balance as at 1 January 2019</b>	<b>6</b>	<b>70</b>	<b>67</b>	<b>143</b>
Addition	1	4	102	107
Accrued interest				-
Withdrawal	-5	-	-44	-49
Other changes				-
Release		-1	-3	-4
<b>Balance as at 31 December 2019</b>	<b>2</b>	<b>73</b>	<b>122</b>	<b>197</b>
<b>Presented under:</b>				
Non-current	-	67	59	126
Current	2	6	63	71

### Provision for reorganisation costs

The purpose of the provision for reorganisation costs is to cover the costs arising from reorganisation measures. Most of the provision is needed for redundancy schemes, bridging payments and the redeployment of staff whose jobs have been eliminated as a result of reorganisations.

### Provision for soil remediation

The provision for soil remediation is for managing and remedying environmental damage. The provision is calculated using an average discount rate of 1.5% (2018: 1.5%).

### Other provisions

'Other provisions' include provisions for losses arising from accidents and fire, uncertainties concerning settlements with carriers, provisions for maintenance in connection with lease contracts and provisions for staff-related matters. This also includes the provision for Individual Compensation for Victims of WWII Transport. The release from 'Other provisions' includes a release relating to the settlement of the amounts reserved for personnel expenses and a release resulting from agreements made with a foreign carrier.

### Individual Compensation for Victims of WWII Transport

During the Second World War, NS operated trains on instructions from the occupying forces. Various discussions with Mr Salo Muller, a Holocaust survivor, have shown that Mr Muller, but also others, want NS not only to commemorate the victims of the transports and their direct descendants collectively, but also to acknowledge and compensate for their suffering individually. NS does not believe that anyone benefits from lengthy legal proceedings and has expressed its willingness to grant individual financial compensation on moral grounds, to those most directly affected by its actions. It was therefore jointly decided not to institute legal proceedings on liability and to set up a committee to implement the compensation scheme. A special committee chaired by Job Cohen has been tasked with handling individual compensation on moral grounds to an as yet undefined group of survivors and their direct descendants. The committee started work in January 2019. The Committee on Individual Compensation for Victims of WWII Transport by NS presented its recommendation on 26 June 2019. NS has adopted the committee's recommendation and made a provision of €47 million in 2019 to account for the expected compensatory payment and costs of execution

(recognised under other operating expenses). The nature of this compensation scheme gives rise to estimation uncertainty regarding both the number of survivors and their direct descendants who are still alive and the number of them who will actually apply for compensation. In 2019, €29 million was withdrawn from the provision and paid out. The provision was remeasured as at 31 December 2019, based on the expected number of applications.

## Accounting policies

A provision is recognised in the balance sheet whenever the Group has a legal or constructive obligation as a consequence of a past event and it is probable that the settlement of that obligation will entail an outflow of funds.

Provisions are determined by calculating the net present value of expected future cash flows based on a pre-tax discount rate that reflects both the current market valuations of the time value of money and, where necessary, the specific risks relating to the liability.

### Reorganisation costs and non-activity schemes

Provisions are made in connection with reorganisations if a formal, detailed plan has been drawn up for the reorganisation, and the reorganisation is either under way or has been publicly announced. No provision is made for future operating expenses. Provisions for reorganisations relate mainly to redundancy schemes, bridging payments and the redeployment of redundant staff.

### Provision for soil remediation

The provision for soil remediation work is intended to cover the costs incurred for the upkeep or repair of operating assets. In line with the Group's published environmental policy and the applicable legal requirements, provisions for the control and remediation of environmental contamination are formed when the contamination occurs or is found to have occurred.

### Onerous contracts

A provision for onerous contracts is included in the balance sheet if the economic benefits that the Group expects to derive from a contract are exceeded by the unavoidable costs of meeting the obligations under the contract.

The provision is measured at the present value of the anticipated net costs of continuing the contract or, where this is lower, the present value of the anticipated costs of termination of the contract, being any compensation or penalty entailed by the breach of contract. Before the provision is formed, an impairment loss is applied to the assets to which the contract relates.

### Other provisions

Provisions are formed for losses arising from fire, accidents, guarantees issued, claims, provisions for maintenance in connection with lease arrangements and other risks.

## 31. Leases

### Group as lessee

The Group has lease contracts for rolling stock, real estate and other operating assets that are used in its operations. The Group's obligations under the leases are safeguarded by the lessor's right to the ownership of the leased assets. Generally, the Group's possibilities for subleasing the leased assets are restricted. There are various lease contracts that contain extension and termination options, which are discussed in more detail below.

The Group also has certain lease contracts for machines with a lease term of 12 months or less and lease contracts for office equipment of low value. The Group applies the recognition criteria for exemptions for 'short-term leases' and 'leases of low-value assets' for these contracts.

The carrying amounts of the recognised right-of-use assets and the changes during the period are stated below.

(in millions of euros)	Rolling stock	Property	Other	Total
<b>Composition as at 1 January 2019</b>				
Cost	2,190	192	15	2,397
Accumulated amortisation and impairments	775	27	2	804
<b>Carrying amount as at 1 January 2019</b>	<b>1,415</b>	<b>165</b>	<b>13</b>	<b>1,593</b>
<b>Changes in 2019</b>				
Additions	783	15	5	803
Acquisitions	-	-	-	-
Depreciation	-402	-18	-2	-422
Impairments	-	-	-	-
Exchange differences	47	-	2	49
Other changes	-1	1	-1	-1
<b>Total changes during the financial year</b>	<b>427</b>	<b>-2</b>	<b>4</b>	<b>429</b>
<b>Composition as at 31 December 2019</b>				
Cost	2,991	208	21	3,220
Accumulated amortisation and impairments	1,149	45	4	1,198
<b>Carrying amount as at 31 December 2019</b>	<b>1,842</b>	<b>163</b>	<b>17</b>	<b>2,022</b>

The carrying amounts of the lease liabilities and the changes during the period are stated below.

(in millions of euros)	<b>2019</b>
Finance lease liabilities as at 1 January	46
Adjustments due to application of IFRS 16	1,604
Lease liabilities as at 1 January	1,650
Additions	825
Interest allocated	37
Payments	-457
Currency differences	53
<b>Lease liabilities as at 31 December</b>	<b>2,109</b>

**Presented under:**

Non-current	1,676
Current	433

The lease liabilities can be subclassified into the following countries:

(in millions of euros)	<b>31 December 2019</b>
The United Kingdom	959
Germany	953
The Netherlands	197
<b>Total</b>	<b>2,109</b>

The maturity analysis of lease liabilities is disclosed in note 26.

The following amounts are recognised in the income statement:

(in millions of euros)	<b>2019</b>
Depreciation of right-of-use assets	422
Interest expense on lease contracts	37
Costs relating to short-term lease arrangements (Other operating expenses)	49
Costs relating to leases of low-value assets (Other operating expenses)	18
Variable lease payments (Other operating expenses)	1
<b>Total recognised in the income statement</b>	<b>527</b>

The Group has no lease arrangements with material variable lease payments.

## Accounting policies

The Group recognises a right-of-use asset and a lease liability at the commencement date of the lease arrangement. The right-of-use asset is initially measured at cost, comprising the initial amount of the lease liability, adjusted for any lease payments made at or before the commencement date of the lease arrangement, plus any initial direct costs incurred and an estimate of the costs of dismantling and removing the underlying asset or restoring the underlying asset or restoring the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated on a straight-line basis from the commencement date until the end of the lease term. The average depreciation periods are as follows:

- Rolling stock: 6 years
- Property: 11 years
- Other: 9 years

In addition, the right-of-use asset is periodically reduced by any impairment losses and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the Group's incremental borrowing rate. The lease liability is measured at amortised cost using the effective interest method. It is remeasured if there is a change in the future lease payments as a result of a change in an index or rate, if there is change in the Group's estimate of the amount expected to be payable under a residual value guarantee or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

## 32. Off-balance sheet arrangements

A number of investigations are under way against NS and/or group companies and various claims have been submitted which are being contested by the company. Where deemed necessary, provisions have been made for this. A number of important subjects are explained below.

### Authority for Consumers and Markets (ACM)

In its judgement of 6 March 2015, the ACM concluded that NS had infringed Sections 67 and 71 of the Railways Act by not making a reasonable offer in the Limburg tendering process for a number of facilities. On 22 May 2017, the ACM ruled that NS had acted in violation of Section 24 of the Competitive Trading Act and Article 102 of the Treaty on the Functioning of the European Union. The ACM therefore imposed a fine of €40.95 million on NS. Based on a system of standards that the ACM itself devised, the ACM concluded that the offer by NS did not satisfy the 'internal rate of return' requirement. This approach taken by the ACM is new and has far-reaching consequences for the rail sector and future tenders and investments by NS. In view of this, NS lodged an objection to the decision. NS disputes the suggestion that it submitted a loss-making bid in the public transport tender in Limburg. The bid also satisfied the 'internal rate of return' requirement. NS therefore disagrees with the ACM's ruling and the supporting arguments for the decision. NS submitted a notice of objection, asking the ACM to reconsider its decision. On 29 March 2018, the ACM dismissed NS's objections. NS lodged an appeal against the ruling on the objection. The fine imposed was paid in 2017 and charged to the income statement in 2017. On 27 June 2019, the District Court of Rotterdam set aside the ACM's decision. The fine was annulled and repaid to NS in July 2019 and recognised in the income statement in 2019. The ACM has lodged an appeal and requested a period of time to supplement its arguments.

## Public Prosecution Service

The Public Prosecution Service (specifically the National Office for Serious Fraud, Environmental Crime and Asset Confiscation in Den Bosch) started a criminal investigation in 2015 into possible criminal acts in connection with the tendering process for public transport in Limburg. The investigation focused on the actions and circumstances surrounding an alleged arrangement regarding the disclosure of business secrets. The suspected parties include the companies NS Groep N.V., Qbuzz B.V., Abellio Transport Holding B.V. and Abellio Nederland B.V. In February 2016, NS Groep N.V. received the final report of the criminal investigation. The Public Prosecution Service then issued NS Groep N.V. with a summons. The substantive proceedings took place in the second half of 2017. On 21 December 2017, the District Court of Oost-Brabant acquitted NS of two of the offences with which NS had been charged and ruled that the Public Prosecution Service was not allowed to prosecute in the case of a third offence with which NS had been charged.

The Public Prosecution Service has appealed against the ruling of 21 December 2017. At present, no reliable indication can be given of the outcome and the financial consequences (the amount of any fine, out-of-court settlement, etc.). As a result, no provision has been included for this.

## Chromium 6

On Thursday, 31 January 2019, the National Institute for Public Health and the Environment (RIVM) presented the results of the Chromium-6 investigation into the reintegration project tROM in Tilburg. In that project, people on unemployment benefit worked on trains belonging to NS and the Dutch Railway Museum at the then NedTrain workshop in Tilburg between 2004 and 2011. The RIVM carried out an investigation in which NS cooperated. An independent committee drew conclusions on the basis of the results of the investigation and formulated ad hoc recommendations. The committee drew firm conclusions, including about the role of NS in the Tilburg project. According to the committee, the municipality of Tilburg, NS and the Railway Museum all cut corners. At the beginning of February 2019, the parties announced that they would come to an arrangement jointly and each on the basis of its own responsibility. The aim is to provide clarity to those involved as quickly as possible.

NS already provided for its share of the expected costs as at 31 December 2018 and remeasured this based on its understanding as at 31 December 2019. The movement in the provision is recognised in other operating expenses.

Furthermore, the police are currently carrying out a criminal investigation on the instructions of the Public Prosecution Service, in which NedTrain is one of the suspects. It is not clear at present what the outcome of this investigation will be.

## Long-term contracts

There were a number of long-term financial commitments to third parties at year-end 2019, mainly concerning lease arrangements for trains, company cars and copiers. There are also long-term contracts for services by third parties in the areas of IT, maintenance and cleaning.

## Energy contracts

As at the end of 2019, the purchase commitments under the energy contract in the Netherlands for the volumes already covered, the payments for the Programme for Responsibility and the surcharge for green electricity for the period 2020-2024 (the remainder of the 10-year contract) came to €235 million (compared with €218 million at the end of 2018). The amount expected to be required for 2020 and 2021 is fully covered. Transport costs and energy taxes are not included in the purchase commitments shown. If

the difference between the market values and the contract value exceeds a given threshold, the Group or Eneco has to give the other party guarantees or provide cash collateral. Any payments and liabilities are netted, as they are both inextricably linked. As at year-end 2019, NS had received €9 million (year-end 2018: €65 million) in collateral in the form of margin money.

For more detailed information about the energy contracts, see note 26.

## **Tax group**

For the purpose of corporation tax, all the Dutch subsidiaries belonging to the Group are part of the NV Nederlandse Spoorwegen tax entity. As a result, the Group is jointly and severally liable for all tax liabilities of the subsidiaries included in the tax entity.

## **Investment commitments**

At the end of 2019, the Group had outstanding investment commitments of €1,312 million (2018: €1,377 million), primarily for purchasing and upgrading trains and investments in the areas around the stations.

## **Lease liabilities that have not yet commenced**

The Group has various lease contracts that have not yet commenced as at 31 December 2019. The future payments under these non-cancellable lease contracts are €117 million within no more than one year, €683 million within no more than five years and €246 million thereafter.

## **Contingent liabilities**

The Group has paid €28 million (translated) of its share in the issued share capital (€111 million after translation) of EUROFIMA AG. The Group has a liability for full payment on demand of the shares and other guarantee commitments totalling €278 million (after translation). Payment of the liability can be demanded if EUROFIMA AG's own equity position gives reason to do so.

As a result of the agreements made with the Belgian carrier regarding the IC Brussels service in the context of the main rail network, the Group is making allowances for a negative balance for the Group in the settlement of the costs of commercial operation for this route. The amount of that negative balance depends on the commercial results on that route.

## **Guarantees**

The Group has issued guarantees totalling €1,033 million (31 December 2018: €830 million) relating to the operation of the various franchises.

## Franchises

The Group had the following franchises during 2019:

Franchises in 2019	Expiry date	Type of contract
<b>The Netherlands</b>		
Main Rail Network/HSL South	31 December 2024	net
Gouda-Alphen aan den Rijn train service	11 December 2031	net
<b>The United Kingdom</b>		
Merseyrail franchise around Liverpool	20 July 2028	mixed
Greater Anglia franchise (East Anglia)	12 October 2025	mixed
Abellio London franchises (bus)	see below	gross
ScotRail franchise in Schotland	31 March 2022	mixed
West Midlands train franchise	31 March 2026	mixed
East Midlands train franchise (from 18 August 2019)	21 August 2027	mixed
<b>Germany</b>		
Emscher Ruhrtal	December 2019	gross
Ruhr Sieg Netz	December 2034	gross
Der Mungstener	December 2028	gross
Saale-Thüringen-Südharz	December 2030	gross
Niederrhein-Netz	December 2028	gross
Rhine-Ruhr-Express (start of the operation in two steps: December 2018 and December 2020)	December 2033	gross
Stuttgarter Netze (start of the operation in June 2019)	December 2032	gross
Dieselnetz Sachsen-Anhalt (start of the operation in December 2018)	December 2032	gross
S-Bahn Rhein-Ruhr (start of the operation in December 2019)	December 2034	gross

### Explanation

*Net contracts are contracts with a revenue risk concerning the revenue from passengers.*

*Gross contracts are contracts with no revenue risk concerning the revenue from passengers.*

*Mixed contracts are contracts with certain protective measures for the revenue from passengers.*

## The Netherlands

### Main rail network

The main rail network franchise is awarded by the Ministry of Infrastructure and Water Management. It covers passenger transport by rail on the main rail network in the Netherlands. The old main rail network franchise and the HSL franchise (see the paragraph below) ended in 2014 and the ministry decided in December 2014 to award a new integrated main rail network franchise to NS for the period from 1 January 2015 to 31 December 2024. The train services on the HSL South have also been covered by this franchise from 1 January 2015 onwards. The franchise agreement stipulates that performance must improve during the term of the franchise. The interim evaluation and final



evaluation will take place over 2019 and 2024 respectively. If NS does not achieve the target values for 2019 or 2024 respectively, NS will be obliged to pay a sum of €1.5 million for each performance indicator not attained up to a maximum of €19.5 million per evaluation. If NS does meet the conditions, a maximum bonus of €10 million can be earned for each evaluation. In addition, the Ministry can impose a fine of up to €6.5 million a year on NS if NS does not achieve the minimum baseline values for the franchise performance indicators. The performance indicators are measured for the following performance areas: general (customer satisfaction), the door-to-door journey, ease of travelling (transport capacity at peak times), journey information (in the event of disruptions), safety (including personal safety) and reliability (punctuality for passengers). NS recognised a bonus of €5.5 million for 2019 for the achievement of performance indicators.

The agreements made with the government include agreements on the production assets (rolling stock in particular) that are to be used for operating the main rail network franchise. Depending on the ownership situation and the form of tender, the production assets may be leased in the event of complete or partial loss of the main rail network franchise to a subsequent franchise holder, or sold at the carrying amount, and/or their leases may be transferred unchanged to the subsequent franchise holder.

The overall fees for track use and the franchise for the integrated main rail network/HSL South franchise were €157 million in 2019. The negotiation agreement of 2011 included an adjustment mechanism to avoid the liquidation of HSA. This adjustment mechanism has been included in the implementation agreement for the franchise. It works as follows. If the average return on investment for the franchise holder over a fixed period turns out to be lower than the threshold value (4%), the holder will be entitled to an adjustment to the franchise price (equal to the difference between the actual return and 4%, with the adjustment over the entire duration of the franchise being capped at the equivalent of €144 million at 2010 prices). There was no entitlement to any such adjustment over 2015. Any entitlement to an adjustment was first calculated in 2016 using the average return on investment for 2015 and 2016, and thereafter on a rolling basis using the previous three years. An entitlement to an adjustment to the franchise price deriving from the implementation agreement does not lapse if at any point in subsequent years the return on investment exceeds the threshold value. Payment of any entitlement that may have arisen through an adjustment to the franchise price will be spread in instalments, as per the implementation agreement. The adjustment mechanism for the average profitability is recognised during the franchise on a straight-line basis covering the entire franchise term.

The franchise also includes an adjustment mechanism for a settlement of any windfalls in energy price changes over the franchise period. This adjustment will be calculated cumulatively, with NS owing the Ministry of Infrastructure and Water Management 75% of the difference between the actual energy prices and the forecast energy prices according to the business case, with no adjustment being made if the cumulative actual return on investment falls below the cumulative norm return. Apart from the calculation outlined above, NS owes an unconditional one-off sum of €56 million to the ministry for 2016. This payment is amortised on a straight-line basis over the entire term of the franchise. This arrangement is capped at €290 million (including the one-off payment) and will never result in a payment to NS by the Ministry of Infrastructure and Water Management. No energy cost adjustment is owed for 2019 and previous years.

### **Gouda-Alphen aan den Rijn franchise**

In 2019, NS operated the Gouda – Alphen aan den Rijn franchise, with a term until 11 December 2031. The franchise was awarded by the relevant province. A fee is received from the franchise authority for the operation of the franchise.

The franchise was awarded by the relevant province. A fee is received from the franchise authority for the operation of the franchise.

## The United Kingdom

### Merseyrail franchise

This franchise is operated as a 50:50 joint venture with Serco, a listed UK company. This is for passenger transport on the railway network in the region around Liverpool. There is an obligation to operate well-defined services (timetable, quality of the service) at a fixed fee that is paid by the regional authorities. An evaluation is carried out every five years, which reviews, among other things, whether the activities continue to be 'efficient'. Merseyrail has successfully completed three evaluations and one evaluation was performed in 2018. This franchise has a term of 25 years (until 20 July 2028). There is an option for an extension by five years. The annual payment from the government (the subsidy) is determined in the contract and is indexed annually.

### Greater Anglia franchise (East Anglia)

Abellio was the operator of the previous Greater Anglia franchise, which expired in October 2016, and was awarded the new Greater Anglia franchise in August 2016. This franchise is operated by the full subsidiary Abellio East Anglia Ltd., which was awarded the new franchise for Greater Anglia in August 2016. In 2017, a total of 40% of the share of the franchise was sold to Mitsui. The franchise operates passenger transport in the railway network in the Anglia region in the eastern part of England. The new franchise commenced on 16 October 2016 and will run until 12 October 2025, with an option for a further extension of one year. There is an obligation to replace the entire fleet of carriages by September 2020 with new carriages for the Rural, Intercity, Stansted Express, West Anglia and Great Eastern routes. This will increase the number of seats. Other commitments include the obligation to invest GBP 120 million in the construction of storage sites and GBP 60 million in the modernisation of stations.

### ScotRail franchise

Abellio was awarded the ScotRail franchise in October 2014. The franchise commenced on 1 April 2015 and has a term of seven years. The ScotRail franchise was awarded by Transport Scotland and is operated by the full subsidiary Abellio ScotRail Ltd, which provides intercity, regional and provincial passenger transport by train on the Scottish national railway network. There is an obligation to provide the specified services (timetable, quality of the services) at a fee determined in advance that is paid by the government (subsidy) and that is indexed on an annual basis.

In December 2019, the Scottish government decided not to agree to our commercially viable option for extending the franchise until 2025 and then used the break clause in the franchise agreement to terminate the ScotRail franchise at the beginning of March 2022.

### West Midlands franchise

Abellio started operating the West Midlands franchise on 10 December 2017. The franchise runs until 31 March 2026. It covers the area around Birmingham and the services from London Euston to Crewe and from Liverpool to Birmingham. The franchise is operated by West Midlands Trains Ltd, a 70:15:15 venture between Abellio, East Japan Railway Company and Mitsui & Co Ltd. The franchise agreement stipulates that new trains need to be introduced in 2021 to provide room for more passengers during peak periods in Birmingham and London. The long trains offer more seats and more space for passengers. In this franchise, investments are also being made in a better ticket system and better journey information as part of the changes intended to improve passengers' journeys.

### **East Midlands Railway**

Abellio started operating the East Midlands franchise on 18 August 2019. The franchise runs until 21 August 2027. The franchise comprises the Midland Main Line, which terminates at London St Pancras, from where the services to Derby, Leicester, Sheffield and Nottingham are operated. It also covers a network of local railway lines serving destinations including Grantham, Lincoln and Mansfield. The routes also comprise services to Luton Airport and East Midlands Parkway. The franchise agreement provides for the introduction of brand new trains to replace the entire existing intercity fleet and passengers will benefit from an 80% increase in the number of morning rush-hour seats in Nottingham, Lincoln and St Pancras. Passengers will also benefit from shorter travel times over long distances, a new express service from Corby via Luton to London, the introduction of improved compensation for delays and flexipass tickets for improved value for money.

### **London**

Abellio London operates bus services in London from a number of depots (with a market share of 8%). The franchises have an average term of five years with an option for extension by two years, depending on the achievement of various performance criteria.

### **Germany**

Abellio operates various train services in the North-Rhine Westphalia (NRW), Central and Southern Germany regions for a fee (subsidy) paid in advance by the government, which is indexed annually. The franchises have terms that expire at different times between 2028 and 2034.

The German part of the Niederrhein-Netz franchise, from Düsseldorf to Arnhem (the Netherlands), started in December 2016.

In June 2016, Abellio was awarded two routes of the RRX (Rijn-Ruhr-Express), the operation of which will commence in two stages. The first route, from Münster to Dortmund, Düsseldorf, Cologne and Aachen, started on 9 December 2018, and the second, from Düsseldorf to Dortmund, Paderborn and Kassel, in 2020.

In November 2016, Abellio was awarded the Stuttgarter Netze franchise. Abellio will operate the franchise from June 2019 with new trains in the Baden-Württemberg region.

In December 2016, Abellio was also awarded the DISA franchise (DISA) for the Saxony-Anhalt diesel network. Abellio started operating this franchise on 9 December 2018 on several routes in the Saxony-Anhalt region.

Abellio was awarded the S-Bahn Rhein-Ruhr franchise in July 2016. Abellio operates this franchise from December 2019 on a number of routes in the NRW region.

In December 2016, Abellio successfully defended its Ruhr-Sieg-Netz franchise. Abellio commenced operating the franchise with a number of trains as from 2019.

On 6 December 2017, the Group increased its interest in WestfalenBahn from 25% to 100%. WestfalenBahn is established in Bielefeld. With its Expresslines Emsland, it connects the cities of Braunschweig and Hannover in Lower Saxony with Bielefeld and Rheine in North Rhine-Westphalia. From Münster, there is a direct line via Meppen and Leer to Emden on the North Sea.

## **33. Related parties**

Transactions with related parties are conducted on an arm's-length basis.

All issued shares are held by the State of the Netherlands. One significant transaction with an enterprise that has a relationship with the State (DUO, the Dutch Education Executive Agency) concerns the consideration received for student public transport cards (2019: €458 million, 2018: €448 million).

Payments of the infrastructure charge for the Dutch infrastructure are made to ProRail BV, a State-affiliated company. This is explained in note 32.

Furthermore, the Group received a sum of €17 million in grants from the State in 2019 through various schemes (2018: €18 million). These grants are recognised as revenue.

For the performance of the activities by Translink Systems BV, the Group paid Translink an amount of €0.1 million in 2019 (2018: €0.1 million) for products and services provided. Translink Systems BV engages in the development, implementation and use of the electronic registration and payment system for public transport in the Netherlands.

The transactions with the Executive Board and the Supervisory Board members are disclosed in note 2.

There were no significant transactions in 2019 or 2018 with joint ventures and other participating interests.

## Group companies

The main companies included in the consolidated financial statements are:

	Percentage interest		Registered office
	2019	2018	
<b>Operating companies</b>			
NS Reizigers BV*	100.0	100.0	Utrecht
Abellio Transport Holding BV	100.0	100.0	Utrecht
NedTrain BV*	100.0	100.0	Utrecht
NS Financial Services (Holdings) Ltd	100.0	100.0	Dublin
NS Stations BV*	100.0	100.0	Utrecht
NS Vastgoed BV*	100.0	100.0	Utrecht
NS Insurance NV	100.0	100.0	Utrecht
NS Opleidingen BV*	100.0	100.0	Utrecht
NS Lease BV*	100.0	100.0	Utrecht
<b>Subsidiaries of operating companies</b>			
Thalys Nederland NV*	100.0	100.0	Utrecht
NS Internationaal BV*	100.0	100.0	Utrecht
NS Stations Retailbedrijf BV*	100.0	100.0	Utrecht
NS Fiets BV*	100.0	100.0	Utrecht
NS OV-Fiets BV*	100.0	100.0	Utrecht
Stationsfoodstore BV*	100.0	100.0	Utrecht
NS Poort Ontwikkeling BV	100.0	100.0	Utrecht
NS Financial Services Company	100.0	100.0	Dublin
DISA Assets Ltd	-	100.0	Dublin
Abellio Nederland BV	100.0	100.0	Utrecht
Abellio Transport Group Ltd	100.0	100.0	Glasgow
Abellio Transport Holdings Ltd	100.0	100.0	London
Abellio Greater Anglia Ltd	100.0	100.0	London
Abellio East Anglia Ltd	60.0	60.0	London
Abellio West Midlands Ltd	70.1	70.1	Birmingham
Abellio West Midlands Ltd	100.0	-	London
Abellio Rail Baden-Württemberg GmbH	100.0	100.0	Stuttgart
Abellio Rail Mitteldeutschland GmbH	100.0	100.0	Halle
Abellio Rail NRW GmbH	100.0	100.0	Essen
Abellio GmbH	100.0	100.0	Essen
Abellio ScotRail Ltd	100.0	100.0	Glasgow
Abellio West London Ltd	100.0	100.0	London
Abellio London Ltd	100.0	100.0	London
WestfalenBahn GmbH	100.0	100.0	Bielefeld
<b>Joint ventures</b>			
Merseyrail Services Holding Company Ltd	50.0	50.0	Hampshire
<b>Other interests</b>			
Reisinformatiegroep BV	41.7	41.7	Utrecht
Eurofima AG	5.8	5.8	Basel

\* Pursuant to the provisions of Section 403 of Book 2 of the Dutch Civil Code, NS Groep NV has assumed liability in respect of the debts arising from legal acts.

Pursuant to Sections 379 and 414 of Book 2 of the Dutch Civil Code, a complete list of the Group's subsidiaries, associates and joint ventures has been filed with the office of the Trade Register in Utrecht.

### 34. Events after the balance sheet date

No matters have come to light after the balance sheet date that provide further information about the actual situation as at the balance sheet date, nor were there events that are significant for the opinion to be formed by users of the financial statements.

## Company financial statements

### Company balance sheet as at 31 December 2019

(before profit appropriation)

(in millions of euros)	31 December 2019	31 December 2018
Non-current financial assets	3,763	3,616
<b>Total assets</b>	<b>3,763</b>	<b>3,616</b>
Equity		
Issued share capital	1,012	1,012
Other reserves	2,146	2,170
Revaluation reserve for associates	59	61
Legal reserve for development costs	350	281
Legal reserve for translation differences	-12	-14
Profit for the reporting period	208	106
	<b>3,763</b>	<b>3,616</b>
<b>Total liabilities</b>	<b>3,763</b>	<b>3,616</b>

### Company statement of income 2019

(in millions of euros)	2019	2018
Other result	-	-
Result of group companies after tax	208	106
<b>Net result</b>	<b>208</b>	<b>106</b>

# Accounting policies applied for the financial statements

## General

In determining the accounting policies for the valuation of assets and liabilities and determining the result for the company financial statements, NV Nederlandse Spoorwegen makes use of the option provided by Section 362(8) of Book 2 of the Dutch Civil Code. This means that the accounting policies for the valuation of assets and liabilities and determination of the result (hereinafter the 'accounting policies') for the company financial statements of NV Nederlandse Spoorwegen are the same as those used for the consolidated financial statements. Participating interests in which significant influence is exercised are valued using the equity method.

Pursuant to Section 402(1), Title 9, of Book 2 of the Dutch Civil Code, a summarised profit and loss account is sufficient in the company financial statements of NV Nederlandse Spoorwegen.

## Participating interests in group companies

The participating interests in group companies are valued using the equity method, with losses only being considered insofar as the shareholder is obliged to eliminate them.

## Result of group companies

The result of group companies consists of the result after income tax.

# Notes to the company balance sheet and income statement

The amounts included in the notes are in millions of euros, unless stated otherwise.

## Non-current financial assets

### Participating interests in group companies

(in millions of euros)	2019	2018
<b>Balance as at 1 January</b>	<b>3,616</b>	<b>3,476</b>
Changes due to application of IFRS 9	-	45
Changes due to application of IFRS 16	-34	-
<b>Revised balance as at 1 January 2017</b>	<b>3,582</b>	<b>3,521</b>
Share in result	208	106
Dividend distributed for the previous reporting period	-37	-8
Other changes	10	-3
<b>Balance as at 31 December</b>	<b>3,763</b>	<b>3,616</b>

## Equity

### Other reserves

(in millions of euros)	Hedging reserve	Fair value reserve	Actuarial reserve	General reserve	Total other reserves	Legal reserve for development costs	Revaluation reserve for associates	Legal reserve for translation differences
<b>Balance as at 31 December 2017</b>	-4	-	-	2,153	2,149	222	61	-14
Adjustments due to application of IFRS 9		45			45			
<b>Balance as at 1 January 2018</b>	-4	45	-	2,153	2,194	222	61	-14
Changes in revaluation reserves	-3	-	-		-3		-	
Dividend paid				-8	-8			
Result for previous reporting period				46	46			
Other changes			-	-59	-59	59		
	-3	-	-	39	36	59	-	-
<b>Balance as at 31 December 2018</b>	-7	45	-	2,132	2,170	281	61	-14
Adjustments due to application of IFRS 16				-33	-33		-2	
<b>Balance as at 1 January 2019</b>	-7	45	-	2,099	2,137	281	59	-14
Changes in revaluation reserves	2	7			9		-	2
Dividend paid			-	-37	-37			
Result for previous reporting period				106	106			
Other changes				-69	-69	69		
	2	7	-	-	9	69	-	2
<b>Balance as at 31 December 2019</b>	-5	52	-	2,099	2,146	350	59	-12

The legal reserve was formed for software development costs. The revaluation reserve was formed for direct changes to the equity in joint ventures and for the non-distributable portion of the equity of NS Insurance. The legal reserve for translation differences comprises all foreign exchange differences arising from the translation of the financial statements of foreign operations, as well as from the translation of liabilities that hedge the company's net investment in a foreign group company.

The hedging reserve is a legal reserve consisting of the cumulative change in the fair value of hedging instruments (derivatives) where the hedged transaction has not yet taken place or the hedged position has not yet been settled.

The fair value reserve is a legal reserve consisting of the cumulative change in the fair value of investments recognised at fair value in other comprehensive income until such time as the investment is no longer recognised in the balance sheet.

### Off-balance sheet commitments

No claims have been brought against NV Nederlandse Spoorwegen and the consolidated participating interests, other than as indicated in note 32, that have not been recognised appropriately in the balance sheet.

For the purpose of corporation tax, both NV Nederlandse Spoorwegen and its Dutch subsidiaries are part of the NV Nederlandse Spoorwegen tax entity. Consequently, NV Nederlandse Spoorwegen is jointly and severally liable for the tax liabilities of the subsidiaries included in the tax entity.



## Key participating interests

NV Nederlandse Spoorwegen is the holding company of NS Groep NV. NS Groep NV is the sole subsidiary of NV Nederlandse Spoorwegen. Please refer to note 33 for an overview of the participating interests

Utrecht, 26 February 2020

### Supervisory Board

Mr G.J.A. van de Aast  
*Chair*

Ms M.E. van Lier Lels

Mr H.H.J. Dijkhuizen

Ms N. Albayrak

Ms. J.L. Stuijt

Mr W.J. van der Feltz

### Executive Board

Mr R.H.L.M. van Boxtel  
*Chair and CEO*

Mr H.L.L. Groenewegen  
*Finance Director*

Ms A.M.E. de Vries  
*Stations and Risk Management Director*

Ms M.E.F. Rintel  
*Director of Operations*

Mr T.B. Smit  
*Commerce & Development Director*

# Other information

# Profit appropriation as stipulated by the Articles of Association

In accordance with Article 21(2) of the Articles of Association of NV Nederlandse Spoorwegen, the Annual General Meeting of Shareholders decides on the appropriation of any positive balance in the income statement.

## Combined independent auditor's report and assurance report

To: the shareholder and supervisory board of N.V. Nederlandse Spoorwegen

Please find below the main conclusions and main features of our audit and review. For the full text of the independent auditor's report, which includes the assurance report on non-financial information, please refer to the next pages.

### Summary

#### Conclusions

Object of audit or review	Outcome of work performed	Level of assurance
Financial statements 2019 (consolidated and corporate)	True and fair view	Reasonable (audit)
Non-financial information 2019	Reliable and adequate view	Limited (review)
Other information, including the reports by the NS Executive Board and the Supervisory Board	No material misstatements	None

#### Main features of our audit and review

What we have done	Scope of our work	Materiality	Key audit and review matters
Audit of financial statements 2019 (consolidated and corporate)	Netherlands, the United Kingdom and Germany	€50 million, based on 0,8% of revenues	Reliability and continuity of the automated data processing system Revenue recognition Accounting for settlement mechanisms included in franchise contracts
Review of the non-financial information 2019	Netherlands, the United Kingdom and Germany	Varies for each relevant part of the non-financial information in scope	Progress and reliability performance indicators related to the main rail network
Procedures for other information	Full reports	Similar materiality levels as our audit and review scopes	No areas of specific focus

## Combined independent auditor's report and assurance report

To: the shareholder and supervisory board of N.V. Nederlandse Spoorwegen

### Our conclusions

We have audited the financial statements 2019 of N.V. Nederlandse Spoorwegen based in Utrecht. The financial statements include the consolidated financial statements and the company financial statements.

In our opinion:

- The accompanying consolidated financial statements give a true and fair view of the financial position of N.V. Nederlandse Spoorwegen as at 31 December 2019 and of its result and its cash flows for 2019 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code
- The accompanying company financial statements give a true and fair view of the financial position of N.V. Nederlandse Spoorwegen as at 31 December 2019 and of its result for 2019 in accordance with Part 9 of Book 2 of the Dutch Civil Code

We have reviewed the non-financial information for the year 2019 of N.V. Nederlandse Spoorwegen based in Utrecht. The scope is described in the section Our Scope. A review is aimed at obtaining a limited level of assurance.

Based on our procedures performed, nothing has come to our attention that causes us to believe that the accompanying non-financial information does not present, in all material respects, a reliable and adequate view of:

- the policy and business operations with regard to Corporate social responsibility; and
- the thereto related events and achievements for the year 2019

in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) and the applied supplemental reporting criteria as disclosed in the chapter Scope and reporting criteria of the annual report.

Based on the procedures performed according to the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720, we conclude that the other information, including the report by the NS Executive Board and the report of the Supervisory Board:

- Is consistent with the financial statements and does not contain material misstatements
- Contains the information as required by Part 9 of Book 2 of the Dutch Civil Code

### **Basis for our conclusions**

We performed our assurance engagements in accordance with Dutch law, including the Dutch Standards on Auditing and the Dutch Standard 3810N, "Assurance-opdrachten inzake maatschappelijke verslagen" (Assurance engagements relating to sustainability reports), which is a specified Dutch Standard that is based on the International Standard on Assurance Engagements (ISAE) 3000, "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information". Our responsibilities under those standards are further described in the section Our responsibilities in this report.

We believe the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

### **Our independence**

We are independent of N.V. Nederlandse Spoorwegen in accordance with the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), the "Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence)" and other relevant independence regulations in the Netherlands. This includes that we do not perform any activities that could result in a conflict of interest with our independent assurance engagements. Furthermore, we have complied with the "Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics)".

## Our scope

### **Our engagements scope**

The annual report of N.V. Nederlandse Spoorwegen consists of the financial statements and other information, including the report by the NS Executive Board and the report of the Supervisory Board, that together gives an overview of the policy, the business operations, the events and achievements with regard to the financial position and corporate social responsibility of N.V. Nederlandse Spoorwegen during the year 2019. The following information in the annual report is in scope of our assurance-engagements.

The consolidated financial statements comprise:

- The consolidated balance sheet as at 31 December 2019;
- The following statements for 2019: the consolidated income statement, the consolidated statement of comprehensive income, the consolidated cash flow statement and the consolidated statement of changes in equity;
- The notes comprising a summary of the significant accounting policies and other explanatory information.

The company financial statements comprise:

- The company balance sheet as at 31 December 2019;
- The company statement of income for 2019;
- The notes comprising a summary of the accounting policies and other explanatory information

The non-financial information consists of the chapters "In brief", "2019 in a nutshell", "Our contributions to Dutch society", "Foreword by the CEO", "Our strategy", "The profile of NS", "Our activities and achievements in the Netherlands", "Our activities and achievements abroad" and sections "Organisational improvements", "Dialogue with our stakeholders" and "Scope and reporting criteria" in the Annual Report 2019 of N.V. Nederlandse Spoorwegen.

The other information comprises:

- The report by the NS Executive Board;
- The report by the NS Supervisory Board;
- Other information as required by Part 9 of Book 2 of the Dutch Civil Code.

### **Limitations to the scope of our review engagement on the non-financial information**

The non-financial information includes prospective information, such as ambitions, strategy, plans, expectations and estimates and risk assessments. Inherently, the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the non-financial information.

In the chapter 'Our impact on the environment and society' the calculations are mostly carried out using sources from external parties. The sources used are disclosed in *Methodologie Impactanalyse jaarverslag 2019* on [www.ns.nl/mvoberekeningen](http://www.ns.nl/mvoberekeningen). We have not performed any procedures related to the content of these external sources, other than evaluating the suitability and plausibility of the external sources used.

The references to external sources or websites in the non-financial information are not part of the non-financial information as reviewed by us. We therefore do not provide assurance on this information.

## Reporting criteria

The financial statements and the non-financial information need to be read and understood together with the reporting criteria. N.V. Nederlandse Spoorwegen is solely responsible for selecting and applying these reporting criteria, taking into account applicable law and regulations related to reporting.

The absence of an established practice on which to draw, to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time.

The reporting criteria used for the preparation of the financial statements and the non-financial information are presented below.

Consolidated financial statements	International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and Part 9 of Book 2 of the Dutch Civil Code
Corporate financial statements, report by the NS Executive Board and report of the Supervisory Board	Part 9 of Book 2 of the Dutch Civil Code
Non-financial information	Sustainability Reporting Standards (option Core) of the Global Reporting Initiative (GRI) and the applied supplemental reporting criteria as disclosed in chapter "Scope and reporting criteria" of the annual report.

## Materiality

### General

The scope of our assurance procedures is influenced by the application of materiality. Our assurance engagements aim to provide assurance about whether the financial statements and the non-financial information are free from material misstatement. Misstatements may arise due to fraud or errors. They are considered to be material if, individually or in the aggregate, they could reasonably be expected to influence the (economic) decisions of users taken on the basis of the financial statements and the non-financial information. The materiality affects the nature, timing and extent of our assurance procedures and the evaluation of the effect of identified misstatements on our conclusions.

### Financial statements

For the audit of the financial statements our considerations regarding the materiality are as follows:

Materiality	€ 50 million (2018: € 45 million)
Benchmark used	0.8% of revenues
Additional explanation	Given the nature of NS, its objectives and the importance of its operating performance in the Netherlands and abroad, its revenue activity base is considered the most relevant basis for materiality.

We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the supervisory board that misstatements in excess of €2.5 million, which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

### ***Non-financial information***

Based on our professional judgment we determined materiality levels for each relevant part of the non-financial information and for the non-financial information as a whole. When evaluating our materiality levels, we have taken into account quantitative and qualitative considerations as well as the relevance of information for both stakeholders and the organization.

### **Our focus on fraud and non-compliance with laws and regulations**

#### ***Our responsibility***

Although we are not responsible for preventing fraud or non-compliance and cannot be expected to detect non-compliance with all laws and regulations, it is our responsibility to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether caused by fraud or error. Non-compliance with laws and regulations may result in fines, litigation or other consequences for the company that may have a material effect on the financial statements.

#### ***Our audit response related to fraud risks***

In order to identify and assess the risks of material misstatements of the financial statements due to fraud, we obtained an understanding of the entity and its environment, including the entity's internal control relevant to the audit and in order to design audit procedures that are appropriate in the circumstances. As in all of our audits, we addressed the risk of management override of internal control. We do not audit internal control per se for the purpose of expressing an opinion on the effectiveness of the company's internal control.

We considered available information and made enquiries of relevant executives, directors (including internal audit, legal, compliance, human resources) and the supervisory board. As part of our process of identifying fraud risks, we evaluated fraud risk factors with respect to financial reporting fraud, misappropriation of assets and bribery and corruption in close co-operation with our forensic and legal specialists. In our risk assessment we considered the potential impact of the risk of bribery and corruption.

We evaluated the design and the implementation and, where considered appropriate, tested the operating effectiveness, of internal controls that mitigate fraud risks. In addition, we performed procedures to evaluate key accounting estimates for management bias in particular relating to important judgment areas and significant accounting estimates as disclosed in section 1 of the financial statements and the disclosure in note 14 of the financial statements. We have also used data analysis to identify and address high-risk journal entries.

We incorporated elements of unpredictability in our audit. We considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance. If so, we reevaluate our assessment of fraud risk and its resulting impact on our audit procedures.

#### ***Our audit response related to risks of non-compliance with laws and regulations***

We assessed factors related to the risks of non-compliance with laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general industry experience, through discussions with the management board, reading minutes, inspection of internal audit and compliance reports and performing substantive tests of details of classes of transactions, account balances or disclosures.

We also inspected lawyers' letters and correspondence with regulatory authorities and remained alert to any indication of (suspected) non-compliance throughout the audit. Finally we obtained written representations that all known instances of non-compliance with laws and regulations have been disclosed to us.

### **Going concern**

In order to identify and assess the risks of going concern and to conclude on the appropriateness of management's use of the going concern basis of accounting, we consider based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion.

Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern.

### **Our scope for the group audit of the financial statements**

N.V. Nederlandse Spoorwegen is at the head of a group of entities. The financial information of this group is included in the consolidated financial statements of N.V. Nederlandse Spoorwegen.

Our group audit mainly focused on the significant group entities NL Reizigersbedrijf and Abellio in the United Kingdom and Germany. We used the work of other auditors in our international network for the foreign group entities. In total our procedures represent 93.1% of the group's total assets and 91.8% of revenue.

By performing the procedures mentioned above at group entities, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the consolidated financial statements.

### **Our key audit and review matters**

Key audit and review matters are those matters that, in our professional judgment, were of most significance in our assurance procedures for the financial statements and the non-financial information. We have communicated the key audit and review matters to the supervisory board. The key audit and review matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our assurance procedures for the financial statements and the non-financial information as a whole and to conclude thereon, and we do not provide a separate conclusion on these matters.

In 2018, "Change in accounting policies relating to defined benefit pension plans in the United Kingdom" was identified, amongst others, as key matter of our audit. As "Change in accounting policies relating to defined benefit pension plans in the United Kingdom" related to a change in accounting policies in the financial statement of 2018, this is no longer a key audit matter of our audit in 2019.

For the audit of the financial statements we identified the following key audit matters:



## Reliability and continuity of the automated data processing system

Key audit matter	How our audit addressed the matter	Key observations
<p>To a considerable extent, NS depends on its IT infrastructure for the continuity of its business operations, mainly related to the revenue recognition process. In recent years, NS has invested in the simplification, standardisation and improvement of the IT infrastructure, systems and processes, focusing on increasing the effectiveness and the reliability and continuity of automated data processing. We refer to the section Risk management included in the NS Annual Report. process.</p>	<p>We performed procedures on the reliability and continuity of the automated data processing only insofar as necessary within the scope of the audit of the financial statements. For this purpose, we included specialised IT auditors in our audit team. Our procedures consisted of the review of the developments in the IT infrastructure, which included the audit of the systems and applications modernised in 2019 and the associated conversions, as well as testing of the internal control procedures relating to IT systems and processes relevant to our audit.</p>	<p>As a result of our procedures, we note that NS has further increased the quality of the IT-controls and information security during 2019. In 2019, NS modernised its IT systems and simplified the application landscape to improve the quality and effectiveness of the IT-control. NS continues to work on an Internal Control Framework to further improve the (formalisation of) internal controls concerning IT processes. We reported our observations on this topic in the management letter. Furthermore, in 2019, further follow-up was given to part of the findings we reported in previous years. The findings that still require attention and related recommendations have again been brought under the attention.</p>

## Revenue recognition

Key audit matter	How our audit addressed the matter	Key observations
<p>The financial statement account revenue includes €5.9 billion of revenues related to the transport of passengers. This amount includes revenues from the sale of various ticket types entitling their holder to transport (passenger revenues) as well as government contributions. The diversity in ticket types, combined with the high volume of transactions and cut-off aspects that apply to various ticket types, requires high standards of reliability and continuity of transaction processing systems in order to guarantee that individual transactions will result in correct and complete revenue recognition. The disclosures relating to revenue recognition with regard to passenger services are included in note 1 to the financial statements.</p>	<p>Our procedures include amongst others, testing of internal controls, performing data analysis procedures, such as trend analyses, analysis of manual journal entries, performing sample testing of correct and complete transaction processing, audit on the basis of third-party confirmations and testing management's estimates with regard to revenue allocation of the different governmental contributions.</p>	<p>NS implemented an Internal Control Framework in 2019 relating to accurate and complete revenue recognition. We reported our recommendations for further improvement in the management letter. We concur with the accounting treatment of NS and disclosure included in note 1 of the financial statements.</p>

## Accounting for settlement mechanisms included in franchise contracts

Key audit matter	How our audit addressed the matter	Key observations
<p>The franchise agreements in Germany and the United Kingdom contain various provisions relating to settlements that take place in the event of certain developments, such as lagging (macro)economic growth resulting in lagging revenue growth, operational performance, infrastructural disruptions and developments of wage and other cost indexes.</p> <p>To determine the size and measurement of these specific settlements, NS is required to make assumptions, resulting in uncertainties in the balance sheet positions and the estimates of the future profitability of various franchises.</p> <p>The specific disclosures relating to these settlement mechanisms are included in notes 7, 14 and 17 of the financial statements.</p>	<p>On the basis of the franchise agreements and other source documents, we have verified the agreements that exist between NS and the various grantors of the concessions.</p> <p>NS has made a best estimate on balance sheet date of the different positions and the future profitability of the franchises as per 31 December 2019.</p> <p>We have validated the assumptions underlying these estimates on the basis of underlying documentation and the conclusions of both internal and independent external experts. Furthermore, we tested the assumptions as used in the past year retrospectively.</p> <p>We have also verified that there are no developments after the balance sheet date that have a significant impact on the estimate as at the balance sheet date.</p>	<p>We concur with the accounting treatment of NS and refer to the disclosures in note 7, 14 and 17 of the financial statements.</p>

For the review of the non-financial information, we identified the following key review matter:

## Progress and reliability performance indicators related to the main rail network

Key audit matter	How our audit addressed the matter	Key observations
<p>NS measures the progress in achieving its strategy and the quality of its service provision by reference to the performance indicators for the main rail network franchise. The progress on these performance indicators also forms an important part of the mid-term review in 2019 and the final evaluation in 2024 regarding the extension of the franchise.</p> <p>Given the relevance, we have identified the progress on and the reliability of this set of performance indicators for the main rail network as a key review matter.</p>	<p>In our procedures, we obtained insight into both the process of preparation and the reporting process.</p> <p>We reviewed the consistency with the public definitions in the 'Vervoerplan 2019' (Transport Plan 2019) and reconciled these with what NS had reported to the Ministry of Infrastructure and Water Management.</p> <p>We have reviewed the disclosures on the main rail network performance indicators included in the sections under Results for 2019.</p>	<p>NS has continued working on an improvement process concerning the internal control of the main rail network performance indicators in 2019. NS expects this process to be completed in full in 2020, as a result of which the reliability of the preparation will increase further.</p> <p>We note that NS continues to depend, for various main rail network performance indicators, on the quality and reliability of information from third parties.</p> <p>In order to correctly interpret the achievement of these performance indicators, they must be read in conjunction with the definitions in the Transport Plan 2019.</p> <p>We deem the disclosures of the performance indicators related to the main rail network franchise to be sufficient.</p>

## Report on other legal and regulatory requirements

### **Engagement**

We were engaged by the supervisory board as auditor of N.V. Nederlandse Spoorwegen on 3 September 2013 as of the audit for the year 2014 and have operated as statutory auditor ever since that date.

### **Responsibilities**

#### **Responsibilities of management and the supervisory board**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code and for the preparation of the other information, including the management board's report, in accordance with Part 9 of Book 2 of the Dutch Civil Code and other information as required by Part 9 of Book 2 of the Dutch Civil Code.

Management is also responsible for the preparation of reliable and adequate non-financial information in accordance with the Sustainability Reporting Standards (option Core) of the GRI and the applied supplemental reporting criteria as disclosed in chapter "Scope and reporting criteria" of the annual report, including the identification of the stakeholders and the determination of material issues. The choices made by management with respect to the scope of the non-financial information are included on chapter "Scope and reporting criteria" of the annual report.

Management is also responsible for such internal control as management determines is necessary to enable the preparation of the financial statements and the non-financial information that are free from material misstatement, whether due to fraud or errors.

As part of the preparation of the financial statements, management is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so. Management should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The supervisory board is responsible for overseeing the (financial) reporting process of N.V. Nederlandse Spoorwegen.

#### **Our responsibilities**

Our responsibility is to plan and perform the assurance engagements in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusions.

Our audit of the financial statements has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Our review of the non-financial information is aimed to obtain a limited level of assurance. The procedures performed to obtain a limited level of assurance are aimed to determine the plausibility of information and vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in a review is therefore substantially less than the assurance obtained in an audit.

We apply the “Nadere voorschriften kwaliteitssystemen” (NVKS, Regulations for Quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and other relevant legal and regulatory requirements. A further description of our responsibilities is included in the annex to the combined independent auditor’s report.

Amsterdam, 26 February 2020

Ernst & Young Accountants LLP

Signed by J. Verhagen

## Annex to the combined independent auditor's report

### Work performed

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We have exercised professional judgment and have maintained professional skepticism throughout the assurance engagements performed by a multi-disciplinary team, in accordance with the Dutch Standards on Auditing and the Dutch assurance standards, ethical requirements and independence requirements.

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Our audit to obtain reasonable assurance about the financial statements (consolidated and corporate) included amongst others:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or errors, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management
- Concluding on the appropriateness of management's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures
- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation

Our review to obtain limited assurance about the non-financial information included amongst others:

- Performing an analysis of the external environment and obtaining an understanding of relevant social themes and issues and the characteristics of the entity
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the non-financial information. This includes the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates by management
- Obtaining an understanding of the reporting processes for the non-financial information, including obtaining a general understanding of internal control relevant to our review
- Identifying areas of the non-financial information with a higher risk of misleading or unbalanced information or material misstatements, whether due to fraud or errors. Designing and performing further procedures aimed at determining the plausibility of the non-financial information responsive to this risk analysis.

These further review procedures consisted amongst others of:

- Interviewing management and relevant staff at corporate and local level responsible for the sustainability strategy, policies and results
- Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures on, and consolidating the data in the non-financial information
- Obtaining assurance information that the non-financial information reconciles with underlying records of the company
- Reviewing, on a limited test basis, relevant internal and external documentation

- Evaluating whether the estimates made in the impact analysis are reasonable, including the assumptions on which the estimates are based, which are included in the document Methodologie Impactanalyse jaarverslag 2019 on [www.ns.nl/mvoberekeningen](http://www.ns.nl/mvoberekeningen)
- Evaluating the suitability and plausibility of the external sources used in the calculations on which the impact analysis is based, which are included in the document Methodologie Impactanalyse jaarverslag 2019 on [www.ns.nl/mvoberekeningen](http://www.ns.nl/mvoberekeningen)
- Evaluating the definitions of the performance indicators related to the main rail network in the Transport Plan 2019 as included in the Downloads on [nsjaarverslag.nl/jaarverslag-2019](http://nsjaarverslag.nl/jaarverslag-2019)
- Performing an analytical review of the data and trends in the information submitted for consolidation at corporate level
- Reconciling the relevant financial information with the financial statements
- Evaluating the consistency of the non-financial information with the information in the annual report which is not included in the scope of our review
- Evaluating the overall presentation, structure and content of the non-financial information
- Considering whether the non-financial information as a whole, including the disclosures, reflects the purpose of the reporting criteria used

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We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements. By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements or in our review of the non-financial information.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which an audit or review had to be carried out on the complete set of financial information or specific items.

We communicate with the supervisory board regarding, among other matters, the planned scope and timing of the assurance procedures and significant findings, including any significant findings in internal control that we identify during our assurance engagements.

We provide the supervisory board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the supervisory board, we determine those matters that were of most significance in the audit of the financial statements and the review of the non-financial information of the current period and are therefore the key audit and review matters. We describe these matters in our combined independent auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

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# NS ten-year summary

(in millions of euros)	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>Balance sheets</b>										
<b>Assets</b>										
Property, plant and equipment	4,260	3,979	3,845	3,654	3,296	3,157	3,115	3,405	3,433	3,272
Investment property	135	151	170	197	194	196	169	314	315	309
Intangible assets	484	416	357	257	225	174	125	117	76	64
Right-of-use assets	2,022	-	-	-	-	-	-	-	-	-
Investments accounted for using the equity method	19	17	26	39	183	185	197	14	14	14
Other non-current financial assets, including investments	159	159	158	267	340	226	205	176	150	146
Deferred tax assets	202	196	260	229	278	295	385	346	392	407
<b>Total non-current assets</b>	<b>7,281</b>	<b>4,918</b>	<b>4,816</b>	<b>4,643</b>	<b>4,516</b>	<b>4,233</b>	<b>4,196</b>	<b>4,372</b>	<b>4,380</b>	<b>4,212</b>
Inventories	184	169	161	139	138	119	109	134	80	95
Other investments	-	-	-	-	270	223	231	279	362	209
Trade and other receivables	1,144	830	648	724	659	499	545	509	680	892
Income tax receivables	13	16	24	4	32	32	30	11	14	-
Other current financial assets, including investments	8	-	-	-	-	-	-	-	-	-
Cash and cash equivalents	818	906	565	709	671	775	759	948	534	386
Assets held for sale	-	191	-	140	-	-	-	-	-	-
<b>Total current assets</b>	<b>2,167</b>	<b>2,112</b>	<b>1,398</b>	<b>1,716</b>	<b>1,770</b>	<b>1,648</b>	<b>1,674</b>	<b>1,881</b>	<b>1,670</b>	<b>1,582</b>
<b>Total assets</b>	<b>9,448</b>	<b>7,030</b>	<b>6,214</b>	<b>6,359</b>	<b>6,286</b>	<b>5,881</b>	<b>5,870</b>	<b>6,253</b>	<b>6,050</b>	<b>5,794</b>
Equity and liabilities										
<b>Equity</b>	<b>3,781</b>	<b>3,627</b>	<b>3,477</b>	<b>3,511</b>	<b>3,309</b>	<b>3,216</b>	<b>3,044</b>	<b>3,168</b>	<b>2,977</b>	<b>2,831</b>
Deferred credits	240	275	314	328	263	112	122	134	170	213
Loans and other financial liabilities, including derivatives	656	740	551	293	440	867	730	577	180	315
Lease liabilities	1,676	-	-	-	-	-	-	-	-	-
Employee benefits	35	30	30	31	30	33	33	35	31	34
Provisions	126	119	114	100	155	140	182	277	349	175
Accruals	32	42	42	36	55	1	23	39	239	103
Deferred tax liabilities	54	48	59	160	168	169	158	153	136	103
<b>Total non-current liabilities</b>	<b>2,819</b>	<b>1,254</b>	<b>1,110</b>	<b>948</b>	<b>1,111</b>	<b>1,322</b>	<b>1,248</b>	<b>1,215</b>	<b>1,105</b>	<b>943</b>
Bank overdrafts	-	-	-	-	-	-	-	-	-	-
Loans and other financial liabilities	99	98	201	77	488	60	57	48	365	387
Lease liabilities	433	-	-	-	-	-	-	-	-	-
Corporate tax payable	10	12	26	7	22	8	8	12	17	7
Trade and other payables	1,497	1,315	1,105	1,023	1,060	868	1,003	1,248	784	794
Deferred income	738	694	246	641	260	372	314	387	754	751
Provisions	71	24	49	37	36	35	196	175	48	81
Liabilities held for sale	-	6	-	115	-	-	-	-	-	-
<b>Total current liabilities</b>	<b>2,848</b>	<b>2,149</b>	<b>1,627</b>	<b>1,900</b>	<b>1,866</b>	<b>1,343</b>	<b>1,578</b>	<b>1,870</b>	<b>1,968</b>	<b>2,020</b>
<b>Total equity and liabilities</b>	<b>9,448</b>	<b>7,030</b>	<b>6,214</b>	<b>6,359</b>	<b>6,286</b>	<b>5,881</b>	<b>5,870</b>	<b>6,253</b>	<b>6,050</b>	<b>5,794</b>
(in millions of euros)	2019	2018	2017*	2016	2015	2014	2013	2012	2011	2010
<b>Consolidated income statement</b>										
Revenue	6,661	5,926	5,121	5,093	4,973	4,144	3,873	4,638	3,628	3,520
Operating expenses	6,382	5,745	5,084	4,965	4,876	3,863	3,990	4,284	3,356	3,286
Share in result of investments accounted for using the equity method	8	14	20	142	70	40	47	-	-	-
<b>Result from operating activities</b>	<b>287</b>	<b>195</b>	<b>57</b>	<b>270</b>	<b>167</b>	<b>321</b>	<b>-70</b>	<b>354</b>	<b>272</b>	<b>234</b>
Net financing result	-51	-14	-5	-9	-23	-35	-26	-25	-12	-22
Share in result of investments accounted for using the equity method	-	-	-	-	-	-	-	1	1	1
<b>Result before income tax</b>	<b>236</b>	<b>181</b>	<b>52</b>	<b>261</b>	<b>144</b>	<b>286</b>	<b>-96</b>	<b>330</b>	<b>261</b>	<b>213</b>
Income tax	-21	-65	-5	-49	-26	-106	53	-67	-50	-53
<b>Result for the reporting period</b>	<b>215</b>	<b>116</b>	<b>47</b>	<b>212</b>	<b>118</b>	<b>180</b>	<b>-43</b>	<b>263</b>	<b>211</b>	<b>160</b>

