

See www.nsannualreport.nl for the online version

NS Annual Report 2018



Table of contents

| | |
|-----|--|
| 2 | In brief |
| 4 | 2018 in a nutshell |
| 8 | Foreword by the CEO |
| 12 | The profile of NS |
| 16 | Our strategy |
| | Activities in the Netherlands |
| 23 | Results for 2018 |
| 27 | The train journey experience |
| 35 | Operational performance |
| 47 | World-class stations |
| | Operations abroad |
| 54 | Abellio |
| 56 | Strategy |
| 58 | Abellio United Kingdom (UK) |
| 68 | Abellio Germany |
| 74 | Looking ahead |
| | NS Group |
| 81 | Report by the Supervisory Board |
| 94 | Corporate governance |
| 100 | Organisation of risk management |
| 114 | Finances in brief |
| 126 | Our impact on the environment and on society |
| 134 | NS as an employer in the Netherlands |
| 139 | Organisational improvements |
| 145 | Dialogue with our stakeholders |
| 164 | Scope and reporting criteria |
| | Financial statements |
| 168 | Financial statements |
| 238 | Company financial statements |
| | Other information |
| 245 | Combined independent auditor's report on the financial statements and sustainability information |
| 256 | NS ten-year summary |

This annual report is published both Dutch and English. In the event of any discrepancies between the Dutch and English version, the Dutch version will prevail.



In brief

More satisfied passengers in the Netherlands

86% gave travelling by train a score of 7 out of 10 or higher



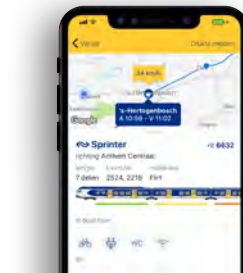
4.2 million trips by OV-fiets

(2017: 3.1 million)



NS app gets seat searcher

On some routes, passengers can see which carriages have free seats



Customer satisfaction with HSL South

83% of passengers gave a score of 7 out of 10 or higher



95.1% chance of getting a seat

(2017: 95.0%)



Clean trains: 68% of passengers gave a score of 7 out of 10 or higher

Cleaning during the journey got lots of positive reactions



Passengers arrive on time more often: 92.6%

(2017: 91.6%)



Passengers can tap their own water

NS is installing over 200 water taps starting in 2018



206 new Sprinter trains

First ones on the track at the end of 2018



Profit of €106 million

(2017: €46 million)



Investments of €898 million

(2017: €618 million)



Revenue of €5,926 million

(2017: €5,121 million)



Passengers feel safer

90% give a score of 7 out of 10 or higher for personal safety in trains and at stations



21,011 employees in the Netherlands



Revenues from Abellio

United Kingdom
€2,467 million
(€1,743 million in 2017)

Germany €357 million
(€246 million in 2017)



2018 in a nutshell



For NS, 2018 was a year with good results on the main rail network. We continued the course that was set in 2017. Passengers were more satisfied and operational performance on the Dutch main rail network was good. HSL South remained a challenge though, demanding attention because of the infrastructure and a software update. With these results for 2018, we are working towards the midterm review, when the government will assess our performance in 2019.

Our performance on the main rail network

| Performance | Realisation in 2018 | Realisation in 2017 | Minimum value 2018 | Target value for 2019 |
|---|---------------------|---------------------|--------------------|-----------------------|
| General customer satisfaction with the domestic main rail network | 86% | 80% | 74% | 80% |
| General customer satisfaction with HSL South services | 83% | 77% | 68% | 73% |
| Customer satisfaction with personal safety | 90% | 88% | 81% | 83% |
| Punctuality for passengers (to 5 minutes) on the main rail network | 92.6% | 91.6% | 88.9% * | 91.1% |
| Punctuality for passengers (to 15 minutes) on the main rail network | 97.7% | 97.4% | 96.7% | 97.3% |
| Punctuality for passengers (to 5 minutes) on the HSL | 82.5% | 83.5% | 82.1% * | 84.1% |
| Quality of connections to other carriers | 95.8% | 95.0% | 94.0% * | 95.6% |
| Seat availability at peak times (main rail network) | 95.1% | 95.0% ** | 94.3% | 95.5% |
| Seat availability at peak times (HSL) | 94.0% | 96.0% ** | 91.2% | 94.9% |
| Top 10 busiest trains | 2.5% | 2.4% | 4.9% | 4.0% |
| Journey information during the train journey | 85.0% | 84.7% * | 81.4% * | 83.1% |
| Information on the train and at stations about delays | 85.2% | 83.2% | 75.0% | 80.0% |

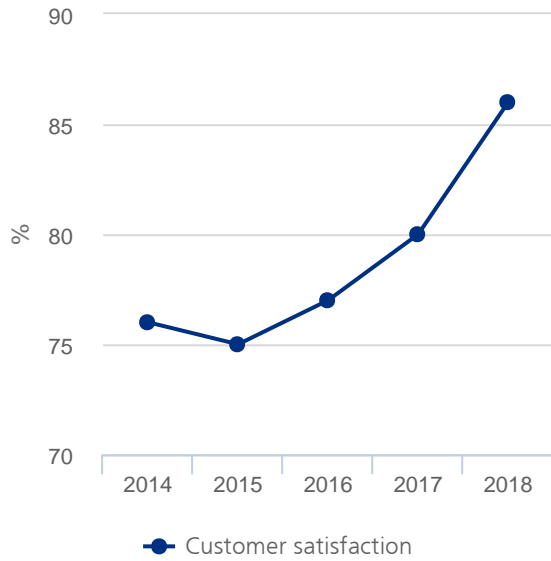
* A small number of performance indicators were changed and one information indicator amended in 2018. Regarding punctuality, there was a technical change to the underlying measurement system. The number of stations was increased from 18 to 27 for the quality of connections. For journey information during the train journey, technical adjustments were made to the calculations and the reference point was changed.

** The comparative figures for the chance of getting a seat on the main rail network and the HSL South have been corrected by 0.1% and 0.8% respectively as a result of physical recounts of the numbers of seats in the train.

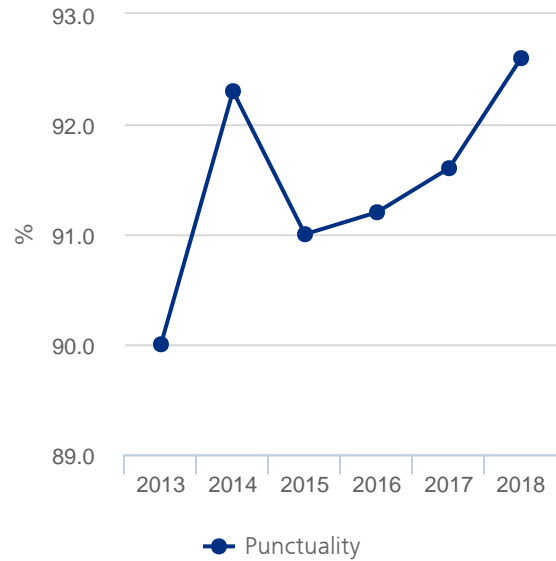
The train journey improved from the perspective of passengers in some key respects in 2018, with more trains per day, more trains running on time and a slightly greater chance of getting a seat. That was reflected in the general customer satisfaction, which rose by 6% to 86%, a record. This was the first year in which we ran Intercity trains every 10 minutes between Eindhoven and Amsterdam. We also started the gradual introduction of 118 new Sprinter trains, adding a total of 20,000 seats. More new trains will be brought into operation in the timetable over the next few years, including the New Generation Intercity trains. At the end of December, we announced an order for another 88 Sprinters. HSL South also saw an improvement in customer satisfaction thanks to the measures taken in 2017, in particular for the *IC direct* service. HSL South's performance deteriorated compared with 2017 as regards punctuality (82.5% as opposed to 83.5%) and seating availability (94.0% as opposed to 96.0%).

Performance in 2018

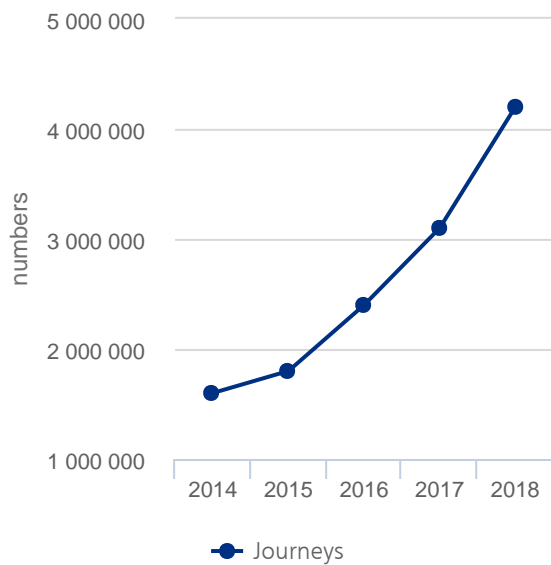
Customer satisfaction



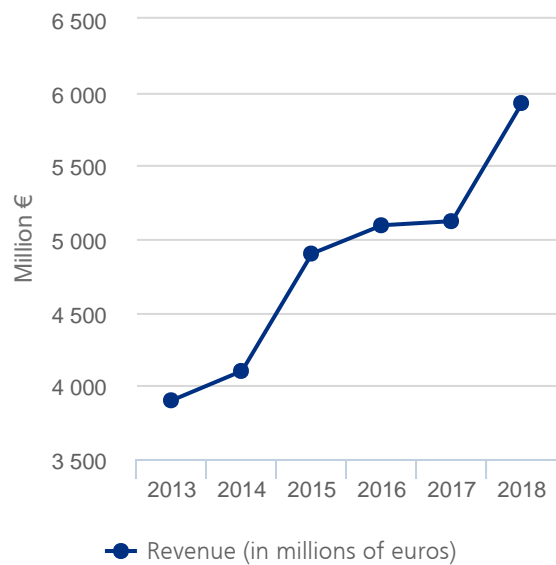
Punctuality



OV Fiets



Revenue



Abellio

NS is continuing to acquire experience on the European railway market through Abellio and we are preparing for any further deregulation of the railways. Revenue grew once again in 2018 following the addition of West Midlands in the United Kingdom and the expansion of our stake in WestfalenBahn in Germany from 25% to 100% at the end of 2017. This trend is expected to continue in the next year when Dieselnetz Sachsen-Anhalt and Rhein Ruhr Express start operation. The performance of ScotRail and Greater Anglia was disappointing.



Finance

It is crucial for NS to remain financially sound in the future as well. NS has invested substantially in new trains and IT, among other things. These investments are much needed but the outlay needs to be recouped. However, NS only has limited options for growing its income. NS can look back on a healthy year in financial terms. Revenues were €5,926 million, which is an increase with respect to 2017 (€5,121 million). NS made investments totalling €898 million. The main rail network franchise KPIs for 2019 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

Passengers travelled over 250 million kilometres more by train in 2018 compared to 2017, which means that our positive social impact on mobility and safe travel with respect to cars has improved once again. Our environmental impact also improved because our trains have been running entirely on wind power since 2017. Furthermore, measures were taken that reduced the negative impact of time spent travelling in packed trains. Studies into how passengers spend their time in the train and at the station showed that they are increasingly making good use of this time, reducing the negative impact of journey time.

NS in 2019

Over the coming year, the focus will be on performing as well as possible for our passengers on the main rail network. As regards the HSL South, it is incredibly important that everyone involved remains sharp and focused on delivering good performance. We are continuing to invest in new trains; the new CAF Sprinters are being brought into operation in phases starting with the new 2019 timetable.

Foreword by the CEO

NS achieved good results last year. Passengers were more satisfied, and performance on the main rail network in the Netherlands was good. New Sprinter trains came into service, we smartened up stations and we improved door-to-door journeys. Together with the stakeholders and our colleagues, we formulated a new mission: 'Together, we make the Netherlands accessible. For everyone.'

We achieved good results on the main rail network in 2018. All the objectives that we have agreed with our franchise authority, the Ministry of Infrastructure and Water Management, are on target. That is something to be proud of: it means that travelling with NS was a pleasant experience for passengers. It means that they almost always arrive on time, can usually count on finding a seat (even at peak times), feel safe at the station and on the train, and travel in clean trains. That's what matters. This is the feedback we get from passengers too: we achieved the best customer satisfaction figures ever. We have also been doing our utmost to provide the best possible services for passengers on the high-speed line. We still have some way to go on HSL South as it is a complex line, although we did achieve the performance targets agreed with the Ministry of Infrastructure and Water Management for the second year in a row.

Passengers spend a lot of time at stations and on trains. That is why we listen to what they want: we offer new services, we run more trains, for example between Eindhoven and Amsterdam, we fixed up stations both large and small, and we offer supplementary services such as the public transport bicycle OV-fiets and the NS Zonetaxi. At the same time, we are aware that our scores are only averages and that we also have to be there to help if things don't go so well. When there is work on the track, for example, we have to offer passengers an alternative, such as replacement transport. Occasionally we do not manage to do that, for example if there is an unexpected disruption. We then have to be able to explain the situation.

New services for passengers

To improve our results further, we are continuing to make travelling by train more attractive. Our passengers have for instance been able to use the NS Flex 'travelling on account' option since 2018. They pay afterwards, so they no longer need to have credit on their card. This convenient new service has met with an enthusiastic response among passengers and it now has nearly 80,000 users. We are also looking at new methods of payment, such as with a bank card or mobile phone.

Furthermore, we have made improvements to the NS app, including the ZitplaatsZoeker (Seat Searcher) for a number of routes that shows how full each carriage is. We want to extend this service further over the coming years. Other milestones were the start of the Eurostar service between Amsterdam and London and the introduction in December of the first of what will be a total of 206 new Sprinter trains on the Dutch network. And we opened a brand new station, Lansingerland-Zoetermeer. On an average weekday, 2,000 to 2,500 passengers use this station. To make the door-to-door journey even better, we extended the availability of the NS Zonetaxi to 244 extra stations.

A focus on safety is important and will remain so. We have a duty to our passengers and our staff for this. The stabbing incident at Amsterdam Centraal station showed how important proper cooperation with the police is for that.

The National Institute for Public Health and the Environment (RIVM) conducted an investigation into hexavalent chromium during the tROM rehabilitation project at NedTrain, part of NS, in Tilburg. Following this investigation, an independent committee concluded that the municipality of Tilburg, NS and the Dutch Railway Museum all cut corners. The parties are accepting their share of the responsibility with respect to the people affected. The committee draws some severe conclusions. Mistakes were made, including by NS. At NS, we are learning every lesson that can be learned from this project. We are fully aware that we owe this to the people affected.

We made proper arrangements for our passengers and staff to allow for the new General Data Protection Regulation (GDPR). We paid considerable attention to training and raising awareness and we set up a new privacy and governance structure. Privacy means more to NS than just mandatory regulations. We handle the details of passengers and of current and former staff transparently, securely and carefully.

Sustainable travel

The door-to-door journey is getting greener. And it has to. Trains in the Netherlands run entirely on wind-generated energy, without emitting as much as a single gram of CO₂. OV-fiets, the public transport bicycle, has become well established over the past 10 years and was used over 4 million times in 2018. Since last year, it has also been possible to hire an electric Greenwheels car at the energy-neutral car park at Driebergen-Zeist station. It is wonderful to see increasing numbers of zero-emission, sustainable shared cars. When our trains are upgraded, 97% of the materials are now being either reused or recycled. And from 2019 onwards, the buses used as replacement transport will be running entirely on fuel made from waste products. With measures like these, the public transport sector as a whole and NS in particular are helping achieve the climate goals for our society.

At and around the stations

NS is back on its feet and – if modesty permits us to say so – has regained its nerve. An example is our involvement in the development of stations and their surrounding areas. Stations are hubs for quality of life and mobility, with service levels and facilities appropriate for their size. We know what motivates our passengers and we are therefore able to work closely with city councils to improve stations or to make plans for nearby projects. In Utrecht, for instance, we started the development of the Cartesius triangle, where about 2,600 homes will be built from 2020 onwards in what is intended to be the healthiest, most public-transport-friendly and bicycle-friendly district in the Netherlands. We were also able to reopen attractively refurbished stations such as Eindhoven.

The financial challenge

Our ever-improving performance for passengers is thanks in part to the substantial investments that NS makes in aspects such as better services, improved IT and (through to 2022) €3.5 billion spent on upgrading and purchasing trains. At the same time, this creates a financial challenge. We have taken measures to improve profitability; we have for instance started up a programme for cutting the costs of overheads and the head office by €50 million over the coming years. This is how NS wants to be able to keep investing in the accessibility of the Netherlands in the future too.

Foreign operations

Since the end of 2017, Abellio UK has been operating the West Midlands franchise, running nearly 1,300 trains a day. This area covers London-Birmingham-Liverpool and the surrounding area. The results for the West Midlands and Merseyrail franchises in particular were good, above the regional and national averages. The performance of ScotRail and Greater Anglia was disappointing. Abellio Germany started operating the Dieselnetz Sachsen-Anhalt and Rhein-Ruhr-Express franchises in December 2018.

Tragic accident in Oss

There are some things you will never forget. The tragic accident in Oss is one such incident. How awful it was for the victims, how unbearable for the relatives and family and friends, and how hard it was on our colleagues who were directly involved. Such young victims – the utter injustice of it is what makes us all so powerless and speechless. In amidst that unfathomable sadness, I still feel proud of the sense of responsibility towards society and towards each other that NS has shown.

Individual redress for the Second World War

NS operated trains during the Second World War for the occupying forces. This is a dark chapter in the history of the country and of our company, a past that we must not ignore. Various conversations with Mr Salo Muller, a Holocaust survivor, have shown that people still feel the need for individual compensation. NS does not believe that anyone benefits from lengthy legal proceedings. A committee started work in January 2019 under the chairmanship of Job Cohen. It has been tasked with handling individual compensation on moral grounds to an as yet undefined group of survivors and their direct descendants.

New vision

Last year, we defined a new mission and vision for NS. 'Together, we make the Netherlands accessible. For everyone.' Precisely because the country is going to be even more crowded in the future and people will want to travel more conveniently, and will want their journeys to be greener. We have a clear goal for that: by 2025, NS will be delivering world-class mobility and we aim to be the best mobility company in Europe. A company where everyone is welcome, both as staff and as passengers. The creation of the new vision was rather special: over 2,000 of our colleagues contributed ideas about the future of NS through a participatory process. This shows incredible involvement, including from the works councils and the trade unions. External stakeholders such as passenger organisations, public authorities and ProRail also gave input. We are currently drawing up a new strategy based on our new mission and vision that will come into effect from 2020.

2019 and beyond

2019 will be an important year for NS. The Ministry of Infrastructure and Water Management will be reviewing the performance of NS on the main rail network in what is known as the 'midterm review'. This is an interim evaluation for the award of the franchise for the main rail network from 2025 onwards, which we want to obtain. This is another reason why it is important to maintain the high quality of our performance and improve it where possible. We will also keep investing in improvements for passengers, at and around stations for example, such as Amsterdam Zuid. NS also carried out a one-off test in 2019 of a faster Intercity service between Groningen, Zwolle and the Randstad conurbation. Whether or not a faster Intercity service will be included in the timetable in the future depends on a range of factors including the results of the test. We must also continue to look at who can help us learn about logistics or providing services. NS focuses on large groups of passengers, but we must not forget the individual passengers and their individual needs and wishes. If we don't want to end up missing the boat in the longer term, we have to stay in touch with our customers. We are alert to others' needs, such as employers. For example, we signed an agreement in 2018 with Vodafone/Ziggo for NS Business Cards for the 7,500 staff at their new head office next to Utrecht Centraal station. This could be an interesting way of encouraging sustainable mobility for other organisations too.

Our aim is to have fast train connections to all the major European cities within a radius of 700 kilometres. This will prevent unnecessary flights, which are a huge environmental burden, and strengthen the economic position of the Netherlands and Western Europe. We put a rapid connection between Amsterdam and Berlin on the agenda in 2018 and we would like to examine it further in 2019 with Deutsche Bahn and the public authorities. The connection between Amsterdam and London will be expanded this year in any event from two to three trains a day.

We will have to take some more major steps together – as a country – over the coming decades if the Netherlands is to remain accessible with a high quality of life. By investing in mobility, beginning with the infrastructure. This is not being given a high enough priority in the Netherlands and elsewhere in Europe. We have to be more ambitious. To that end, NS is involved in the Mobility Alliance, together with over 20 other parties from the Dutch transport sector, with the aim of creating a vision for mobility until to 2030.

Efforts by our staff

There is a concealed world behind the results of NS, in which thousands of staff are working purposefully day in, day out. Nobody can do it on their own. In the train, at the station, when providing journey information or customer services, in the workshop, in the IT department – we're all there every day to make sure everyone has a good journey, dealing with all the inevitable challenges. Proper maintenance, a cleverly-constructed timetable plus our punctual drivers and guards are making sure that we increasingly run as scheduled. Sometimes we crank up the effort even more, for instance during the Four Days March when we carry thousands of extra passengers 24 hours a day to and from Nijmegen. NS is a company with about 30,000 employees, of whom over 20,000 work in the Netherlands. We're a people company, not a machine. And we're proud of that. In 2018, we focused once again on nurturing a strong culture of openness and accountability, making real progress in terms of integrity and compliance. That remains important: we attach great value to operating in accordance with the agreed norms and values. We want these joint efforts to enable us to maintain the current level of performance and improve it where possible. That is the best way to make sure that people will continue to choose the train.

On 21 February 2019, Susi Zijderveld announced that she would be leaving NS as of 1 May 2019. Susi joined us a few years ago with the task of making risk management at NS more professional. She has also initiated a change in the corporate culture, with demonstrable improvements in openness and accountability. The positive social impact of our stations has improved under her watch. She also helped create a good and cooperative atmosphere at the top of the company. I think it is a real pity that she is leaving and NS is incredibly grateful to her. On behalf of the Executive Board and all her NS colleagues, I would like to thank Susi for all she has done in the past few years.

Finally, I and my fellow Executive Board members would like to thank everyone at NS. They deliver top-level performances every day, making NS a unique company. We would also like to thank the Supervisory Board and our shareholder for their huge efforts and dedication in 2018 and for the trust that they have shown in us. My thanks to the works councils as well. We have worked together well, with everyone putting the company's interests first. There were elections for the new works council in the second half of 2018. The Executive Board is looking forward to working with the new members to create an NS that is ready for the future.



Roger van Boxtel, Chairman and CEO of NS

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 that can be based on timely and up-to-date information.

Our 36,600 staff (33,571 FTEs at the end of 2018) in the Netherlands and abroad work hard every day to achieve this. Together with our public transport partners, we work continuously on improving our services and on performance on the tracks, world-class stations, the customer experience and our own organisation. We are active in passenger transport and in station development and operation. We achieve revenues of €5.9 billion from that, 89% of which comes from passenger transport.

NS in the Netherlands and Europe

Ever since NS was founded – in 1837 as the HJSM – we have been making a contribution to mobility and progress in the Netherlands. The company still plays a very significant social role in the domestic market. Since 2002, the 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 14,600 staff), Commercie & Ontwikkeling (700), NS Stations (5,000 including retail) and Abellio UK (13,000), Abellio Germany (2,100) 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. NS Operatie is the most visible part of NS. In addition to the staff on the trains and Safety & Service, it also covers maintenance, repairs, cleaning and upgrading our trains in the Netherlands, as well as making them more sustainable. In the Netherlands, NS transports 1.3 million passengers every day.

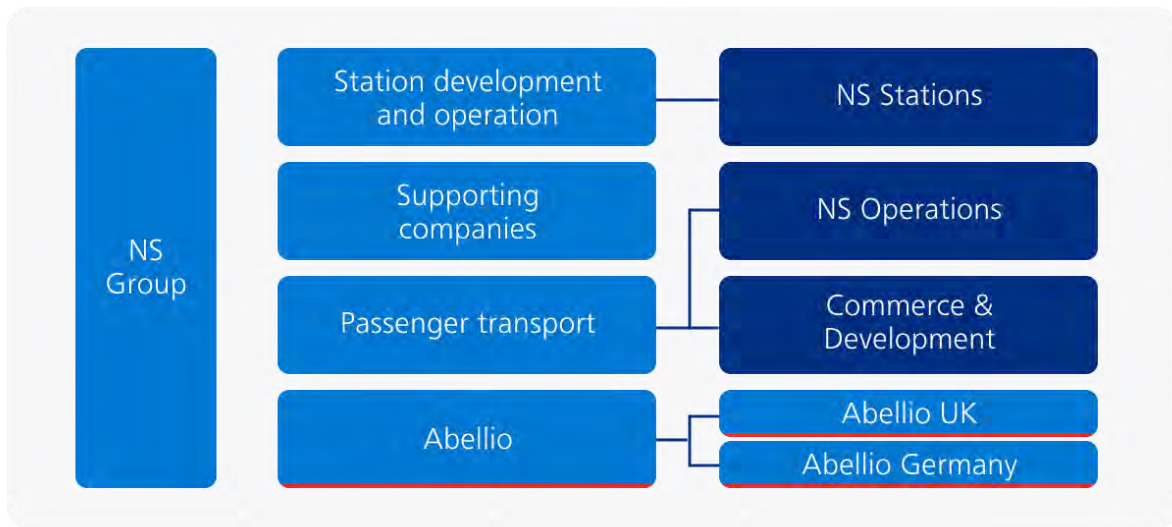
Commercie & Ontwikkeling (C&O) handles the development of train services and timetables in the medium and long term, as well as the sales and service activities associated with domestic and cross-border train transport. C&O is also responsible for customer service.

NS Stations works to create a good network of 402 stations, large and small. Together with ProRail, the public authorities and all the carriers, NS Stations aims to make the journey and the time spent in and around stations as pleasant and comfortable as possible. Over recent years, NS Stations has worked with ProRail and various municipalities to renovate major stations, emphasising that the stations should be ‘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 acquires and runs rail and bus franchises in the United Kingdom (Greater Anglia, Merseyrail, ScotRail, West Midlands and Abellio UK Bus). 13,000 staff in the United Kingdom work together to transport 800,000 passengers a day.

Abellio Germany acquires and operates rail franchises only. In 2018, Abellio Germany was running six franchises in six contiguous federal states. Abellio Germany carries about 171,000 passengers a day. There are 2,000 employees working for Abellio Germany. Abellio Germany started operating the Dieselnetz Sachsen-Anhalt and Rhein-Ruhr-Express franchises in December 2018.

Organisation chart



Rail franchises in Europe

Click on a franchise for details.

The image displays a grid of rail franchise maps across Europe. Each map is titled with the franchise name and shows the network routes. The franchises shown are:

- NS, including HSL Intercity direct:** Shows the Dutch rail network with major hubs like Amsterdam, Rotterdam, and Utrecht.
- ScotRail:** Shows the Scottish rail network connecting major cities like Glasgow, Edinburgh, and Aberdeen.
- Merseyrail (50% joint venture):** Shows the Mersey Valley rail network in the UK, centered around Liverpool.
- Greater Anglia:** Shows the rail network in East Angles, UK, connecting London to Norwich and Ipswich.
- West Midlands Trains:** Shows the rail network in the West Midlands, UK, connecting London to Birmingham and other regional centers.
- WestfalenBahn:** Shows the rail network in Westphalia, Germany, connecting major cities like Münster and Hamm.
- Abellio Mitteldeutschland:** Shows the rail network in central Germany, connecting cities like Berlin, Magdeburg, and Leipzig.
- Abellio Nordrhein-Westfalen:** Shows the rail network in North Rhine-Westphalia, Germany, connecting major hubs like Düsseldorf and Cologne.
- Abellio Rail Mittel-Deutschland:** Shows the rail network in central Germany, connecting cities like Berlin and Potsdam.



About the scope of this report

NS is a company that is based in the Netherlands and has a single, Dutch shareholder, the Dutch State. In this annual report, published on 28 February 2019, we are therefore primarily giving an account for our Dutch stakeholders. NS focuses on passengers and ensuring that their door-to-door journeys are comfortable. NS concentrates primarily on improving operational performance on the railways, supported by activities that include bicycle facilities, stations and improving the door-to-door journey together with other public transport partners. In addition, we aim to remain a financially healthy organisation. Our stakeholders expect that from us as well. They also want to see accountability for our non-financial results. To many stakeholders, customer satisfaction, safety and punctuality are more important than the financial position. This is also seen in the regular dialogues with our stakeholders.

NS is able to have its greatest social impact in the Netherlands. In order to offer passengers the best possible service at the right price, we are also accumulating experience abroad. That keeps us on our toes. Our goals in Germany and the United Kingdom are to acquire knowledge and experience, and to do so profitably. Like other major European state railway companies, we are preparing for possible further deregulation of the market. Activities abroad have to be of benefit to the interests in the Netherlands. Our Dutch stakeholders say that they believe 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. The franchises in other countries are subject to franchise arrangements that have been contractually agreed with the franchise authority. That is why they focus more on operational affairs.

In addition to the financial statements and the combined auditor's report, the NS Annual Report for 2018 contains other information, comprising:

- the Profile of NS, Foreword by the CEO, Our Strategy, all sections in Activities in the Netherlands and Operations Abroad, Looking Ahead, Corporate Governance, Organisation of risk management, Finances in Brief, Our Impact on the Environment and on Society, NS as an Employer in the Netherlands, Dialogue with our Stakeholders, Scope and Reporting criteria
- The report by the Supervisory Board, included in the NS Group section, and
- other data, in accordance with Part 9 of Book 2 of the Dutch Civil Code.

This annual report is subdivided into three blocks:

1. A core report containing the profile, the foreword by the CEO, our strategy, operational results and looking ahead. For the operational results, the heart 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.
2. A section containing other information such as corporate governance, stakeholder dialogues and the social impact analysis.
3. Financial statements.

Our strategy



The current strategy entitled *Spoorslags Beter* (Improving the fast track) gives our choices for 2016-2019 and states that our key goal is to improve performance for our passengers. We do that by focusing on our core activities, improving performance on the main rail network, letting public values guide our actions, and working in a more result-oriented way.

Over recent years, our performance on the main rail network has improved and we are meeting all the performance indicator targets. Passengers are arriving on time more often and they have a better chance of finding a seat at peak times. More trains are also running, including Intercity trains every ten minutes between Amsterdam and Eindhoven, the Intercity Brussels on the HSL South and the Eurostar to London. The good results translate into higher customer satisfaction.

To achieve all this, as part of *Spoorslags Beter*, we have invested in new trains and upgrading trains, for instance, and better journey information, more attention to the operational processes, new methods of payment and further improvements to stations. Growing mobility means that it is still important that we facilitate this. Over the coming years, we will need to improve the financial result so that we can realise and finance our plans for the future.

Core activities

Our goal for 2019 is to perform as well as possible – with an eye on the midterm review – by making passengers, passengers and passengers our top priorities. We have explicitly chosen three core activities:

1. **better performance on the main rail network, including HSL South** and the associated national and international train services. This means better train journeys, greater reliability and cleaner trains, as well as investments in new and refurbished trains. We are also increasing the frequency of services on busy routes so that we can transport more passengers.
2. **World-class stations.** Without stations, there would be no trains. The stations are an essential link in passengers' door-to-door journeys and they have a major effect on our customer satisfaction figures. At stations, passengers expect easy connections to all transport modalities, time spent there to be safe and comfortable, a positive experience and an ambience they can identify with. We are working in close collaboration with ProRail and in consultation with local authorities to arrange that.
3. **A better door-to-door journey.** NS is one of the elements in the passenger's journey from door to door. That is why we also want to make a contribution to the first and last stages of the journey. We aim to improve the journey experience by introducing new payment methods and even better journey information – with the NS app as a 'digital journey guide' – whereby convenience takes priority. We align the train timetable as much as possible with bus, tram and metro services, offer supplementary transport services such as the public transport bicycle (OV-fiets) and Zonetaxi and ensure that stations are comfortable, multimodal transport hubs for passengers. We do this together with governmental authorities, other carriers, infrastructure operators and consumer organisations. This puts passengers in control of their own journeys.

By focusing on these three core activities, we have genuinely prioritised passengers and we will be giving further substance to our role in society of bolstering sustainable mobility in the Netherlands. In everything we do, one question takes top priority: will passengers benefit from this?

Abellio

We will be expanding the foreign operations of our subsidiary Abellio in a targeted fashion, and with due consideration of the business risk, in a limited number of deregulated European markets, namely the United Kingdom and the German regions. This will let NS acquire experience in the European railway market. Abellio bids for franchises with a controlled risk profile.

Key objectives for 2019

To achieve our aims as defined in *Spoorslags Beter*, we are focusing on four key objectives for 2019:

1. Customer satisfaction with the main rail network (including HSL South) of 80%
2. Achieving all the main rail network targets
3. Growth in passenger numbers in the Netherlands of 1.5% on top of the overall growth in mobility
4. Effective organisation

Linking strategy and objectives

NS recalibrates the strategy every year in the business planning round and makes adjustments where necessary. For each theme, the business units develop action plans, aiming to achieve all the targets set, efficiently and effectively. We apply targets to the underlying KPIs, which we then publish for each business unit. This makes it clear to all employees how their work is contributing to the goals of NS. The progress in the action plans and the developments in the KPIs are a focal point of the business reviews held with all line directors each quarter.

Additional actions are taken where necessary.

When starting new projects and programmes, the portfolio management department determines the extent to which the new activities are helping to achieve the objectives. This is done using models where possible, for example for customer satisfaction, or sometimes with expert panels. This creates a closed cycle of 'plan-do-control-act', and we always have a clear picture of where adjustments are needed and how different activities help to achieve our objectives.

Strategic themes

In order to realise the main objectives for 2019, NS is focusing on eight strategic themes. Activities, projects and programmes have been clustered within these themes and linked to quantifiable objectives.

- *An attractive physical offering*: Our passengers will be offered a rail service that meets their requirements by giving them a seamless and robust door-to-door journey, in cooperation with various partners.
- *Optimising the customer experience*: The journey experience of every passenger will be optimised to fit passengers' key requirements (being in control, freedom and respect) by providing a valuable product plus personal and intuitive service.
- *Performance of HSL South*: We will deliver a reliable HSL South service for our passengers by paying attention at all times to every step in the existing service and by introducing new, attractive and reliable services.
- *Perfect execution*: Our performance for passengers improves when we carry out the appropriate tasks for our roles in line with the plans, with rapid decision-making, journey information during disruptions, continuous improvement in the execution, more seats and greater comfort thanks to the smooth introduction of new and upgraded rolling stock into the timetable.
- *Improvement in profitability and financing capacity*: NS will remain financially independent by achieving sufficient profitability to keep the plans for the future financially feasible;
- *Organisational improvements*: NS will develop into a results-oriented and inspirational organisation in which business is done in an open and safe working environment, respecting the generally accepted and specifically agreed norms and values;
- *World-class stations*: All passengers will enjoy top-quality facilities at our stations, ensuring a pleasant experience and optimum use of their time.
- *Abellio*: Abellio will provide sustained results and help NS to learn from its experience abroad and the preparations for any further deregulation of the market.
- NS is transparent about its performance. Every month, it reports via www.ns.nl on the scores for the KPIs that have been set for the franchise, with detailed supporting evidence.

Strategy development (2020 -2025)

'Together, we make the Netherlands accessible. For everyone.'

To ensure that the Netherlands remains accessible, we put major efforts in 2018 into finding the connections within NS and beyond in order to shape our new vision of the future. Every new vision stands on the shoulders of its predecessors; that applies to NS too. This lets us ensure continuity, while we also have to keep moving with the times.

Developing a strategy, with others

To find answers for the mobility issues, we sought out broad-ranging cooperation. Various meetings were held at NS throughout the Netherlands and online, with staff, with the works councils and the unions, thinking about the future of NS so that we can shape our vision, together.

In addition, we talked to over 70 external stakeholders about NS's role in the future of mobility in the Netherlands. Various dialogue sessions included representatives from ministries, regional authorities, consumer organisations, partners from the Mobility Alliance, nature and environmental organisations, trade unions, suppliers and knowledge partners, the youth organisations of political parties and the NOVB (National Public Transport Council).

Based on all the insights, we presented the new joint vision of NS, within the broader context of mobility in the Netherlands, midway through 2018.

Interim result: the new mission and vision of the future for NS

'Together, we make the Netherlands accessible. For everyone.' That is our mission. Especially because it 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 put it simply: we want to be the best mobility company in Europe.

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

Next steps

We are working out the strategy for the Netherlands from 2020 onwards, based on the mission and vision. In 2018, we worked on the strategic directions for NS in the Netherlands ("What are we going to do?"). The elaboration of the strategic choices ("How are we going to do it?") and the objectives will be in mid-2019, after which we will let *Spoorslags Beter* transition to the new strategy in 2020.

How NS adds value to society

NS provides sustainable mobility to more than 9 million passengers in the Netherlands every year, which is its contribution to the economic development and accessibility of the cities and the regions, as well as to achieving Dutch climate objectives. The annual report tells you about the ways we are creating value for society in the Netherlands. The value creation model at the end of this section shows the social, economic and environmental resources we use, the value NS adds to them and what that then yields for society.

Input

To let our business model function as well as possible, we need some key inputs. 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.

Business model

Our current *Spoorslags Beter* ('Improving the fast track') strategy gives passengers top priority. In addition, we have the objective of improving sustainable mobility in the Netherlands while at the same time running sound business operations. NS focuses on three core tasks: providing a good train journey, world-class stations, and improving the door-to-door journey by letting passengers control their own journeys. This is our contribution to affordable and sustainable mobility in the Netherlands.

Output








The activities in our business model have a variety of internal and external outcomes. For example, in addition to our financial results, we handle over 1.3 million train journeys a day in the Netherlands, we take good care of our staff and our trains almost always run on time.

Our impact

We have a major impact on our surroundings. Mobility is very beneficial to the Netherlands in economic and social terms. But customers also lose journey time when there are delays and we do have a negative environmental impact because of the raw materials we use. If we are to be able to keep people travelling in future and keep the Netherlands mobile, it is important for us to have insights into the effects our business model has on society and to keep using them as control parameters. We know, for instance, that the social costs of a train journey remain less than for a car journey; where the environment or safety are involved, we will be able to increase our social return by increasing our share in overall mobility growth.

Value creation model

Input

| | |
|--|---|
|  Stations |  Trains |
|  Employees |  Partnerships |
|  Income |  IT Systems |
|  Franchises abroad | |

Business model

Our mission











Together, we make the Netherlands accessible. For everyone.

Our goal for 2019 is to perform as well as possible - with an eye on the midterm review - by making passengers, passengers and passengers our top priorities.









This is done by:

- 1 **Offering passengers a good train journey**
- 2 **Having world-class stations**
- 3 **Help improve the customer's door-to-door journey**

Output

| | |
|--|--|
|  Investments |  ROE |
|  Customer satisfaction |  Personal safety |
|  Trained staff |  Station experience |
|  Staff disadvantaged in the labour market |  Passenger-kilometres |
|  CO ₂ avoided per km |  Employee satisfaction |

Impact

| | |
|---|--|
|  Sustainable mobility |  Mobility |
|  Impact of stations |  Safety |
|  Health |  Being a good employer |
|  SDG |  Socio-economic |



Activities in the Netherlands

Results for 2018



NS is working towards the midterm review in 2019, when the authorities will examine our performance. By making passengers our top priority we are making train services more robust, and we are offering a seamless door-to-door journey. We report openly and transparently about our performance.

Main rail network franchise 2015-2025

The State Secretary for Infrastructure and Water Management awarded the rail transport franchise to NS in December 2014. This franchise runs from 1 January 2015 for a term of ten years. This means that NS will be operating on the main rail network in the Netherlands until 2025, at any rate. 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 have linked our aims and objectives to specific actions and performance indicators for the coming year, so 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 here [<link>](#).

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.

A midterm review will be held in 2019, as prescribed in the main rail network franchise. This evaluation will assess whether the way the franchise activities have been carried out by NS has resulted in the improvements required for the Long-Term Rail Agenda. The minimum and target values for the period 2020-2024 will also be determined during the midterm review.

Changed indicators

In 2018, the norm values for '5-minute punctuality for passengers on the main rail network', '5-minute punctuality for passengers on HSL South', 'Quality of connections with other carriers' and 'Journey information in and for the train' were changed while retaining the overall level of the ambition. This section describes these changes.

Technical changes in the punctuality measuring system

To control the daily train services, ProRail traffic control used to use an IT system called the Traffic Control System (*Verkeersleidingsysteem, VKL*). On 22 January 2018, ProRail switched to a new system, the Traffic Control Operational System (*Verkeersleiding Operationeel Systeem, VOS*). These systems also record the train arrival times. This information is used to calculate four performance indicators: 'Quality of connections with other carriers' and the three for 'Punctuality for passengers'. The source data is different in the new system to the old one, which changes the outcomes for the above-mentioned performance indicators.

Expansion of the number of changeover stations

The list of changeover stations for the 'Quality of NS connections to other carriers' KPI was altered in 2018 at key hubs. All the stations where changeovers between carriers are possible were now included. The number of stations rose from 18 to 27.

Changes in the calculation of 'Journey information'

Technical corrections were applied to the 'Journey information' performance indicator that resulted in the realisation figure being increased slightly and which required changes to the other values. There was also a functional change in this KPI. Up to and including 2017, the information boards at the stations had to display all changes in the timetable with respect to the annual plan (the yellow departure charts). From 2018 onwards, a platform change that is planned more than one day in advance no longer counts as a platform change for this KPI. Only platform changes that are put into effect on the day itself have therefore been counted from 2018 onwards when calculating this performance indicator.

About NS and HSL South

After the V250 (Fyra) was taken out of service in 2013, NS made agreements about alternative types of train for use on the HSL: a mix of high-speed and Intercity trains. There were also agreements to run more trains on the high-speed line with the addition of domestic Intercity trains to and from the main rail network. Finally, NS promised to offer more foreign destinations via HSL South such as London, to operate the IC Brussels service and to substantially increase the frequency of the Thalys service.

In 2013, NS started an Intercity direct service from Amsterdam to Breda and we recommenced the Benelux link one year later. This is the Intercity Brussels, which is again running once an hour between Amsterdam and Brussels without a surcharge or mandatory reservation, via Schiphol and Rotterdam. Thalys went up from 8 to 14 trains a day and the French city of Lille was added as a destination twice daily. From the end of March 2019 onwards, Thalys will run to Disneyland Paris instead of Lille. The Intercity between The Hague and Eindhoven was introduced in April 2017. This train runs partly on the HSL South track and passengers have a journey that is 11 minutes shorter over the whole route. The Eurostar and IC Brussels have been using the HSL South track since April 2018.

Complexity of HSL South

HSL South is complex. The combination of infrastructure, safety, rolling stock and timetable is unique. There are three types of train that run frequent services on the HSL South track. The HSL line consists of both newly laid and conventional track. Trains that run on the HSL South (such as the route from The Hague to Eindhoven, Intercity direct, Intercity Brussels and Eurostar) therefore have to handle multiple system transitions *en route* for both the power supply and the safety system. This all makes it very vulnerable to faults, and faults can rapidly have major consequences for passengers.

Train cancellations because of TRAXX software problems

Some of the train cancellations in 2018 were due to software issues in the TRAXX locomotives that NS uses on the HSL. All the locomotives have been given new software from the end of 2018, although this also turned out to have an error. NS is busy correcting this. This software is aimed at preventing sudden stoppages on the HSL South. New software is just one of the measures taken to tackle the issues on the HSL South and it will not resolve all the problems.

Changes needed to the HSL South infrastructure

The current trains with TRAXX locomotives have been made suitable for the high-speed line. A radical alteration to the infrastructure is needed in order to get the performance up to the right level in the longer term and make structural improvements. This is the result of an independent study carried out by Railistics that was commissioned by NS and ProRail.

In the long-term vision for the HSL South, NS and ProRail have worked out a series of measures for improving the infrastructure on the HSL South, with the aim of bringing performance in the longer term up to the same level as on the main rail network. That means eliminating design errors that were made when the track was being laid, such as the numerous voltage changeover sections and the multiple safety systems. The same reliability as is achieved on the conventional tracks can only be expected if radical changes are made. Over recent years, NS and ProRail have been working hard on improving performance on the HSL South. NS and ProRail will be continuing the HSL Improvement Programme unabated in 2019.

Trains per day on the HSL South

| | 2018 | 2017 | 2013 |
|--------------------------------------|------|------|------|
| Intercity direct | | | |
| Amsterdam-Breda | 68 | 70 | -- |
| Amsterdam-Rotterdam | 64 | 62 | -- |
| Intercity The Hague-Eindhoven | 73 | 73 | -- |
| Thalys | | | |
| Amsterdam-Paris | 26 | 26 | 8 |
| Amsterdam-Lille | 2 | 2 | 2 |
| Intercity Brussels | 32 | -- | -- |
| Eurostar | 4 | -- | -- |

The train journey experience



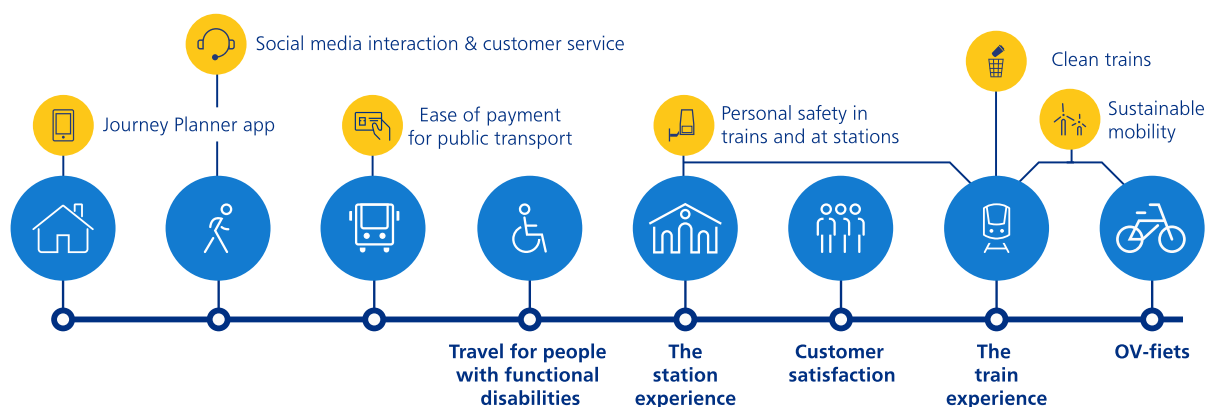
We optimise the journey experience of every passenger to fit the passengers' key requirements (being in control, freedom and respect) by providing a valuable product plus personal service.

Customer satisfaction on the main rail network

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|---|---------------------|---------------------|------------------------|-----------------------|
| General customer satisfaction with the domestic main rail network | 86% | 80% | 74% | 80% |

In 2018, passengers on the main rail network were more satisfied with travel by train than in 2017: 86% of passengers gave a score of 7 out of 10 or higher, compared to 80% in 2017. Commuters and social/recreational *and* business passengers were more satisfied, among other things with our operational performance such as punctuality, the cleanliness of trains and the availability of a seat. They were also more positive about NS staff, the time spent in the train and the stations.

Customer satisfaction



Customer satisfaction on the 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 | 83% | 77% | 68% | 73% |

Despite the HSL South performing less well in a number of areas over the course of the year, passengers were more positive about travelling with the HSL South than in 2017: 83% of passengers gave a score of 7 out of 10 or higher (77% in 2017). The increase in rail passenger numbers on the HSL was considerable, at about 15%. The increasing crowding is affecting the chance of getting a seat, which in turn has a negative impact on the general customer satisfaction. The IC Brussels service received lower scores compared to other HSL services. Despite that, passengers are more positive about the HSL South than in 2017. The biggest increase in the general score was for the Intercity direct.

Hospitality

| | 2018 | 2017 | 2016 | 2015 |
|---|------|------|------|------|
| Customer satisfaction with approachability of NS staff aboard the train | 83% | 82% | 77% | 80% |
| Customer satisfaction with friendliness of NS staff aboard the train | 92% | 91% | 91% | 90% |
| Customer satisfaction with approachability of customer service staff at departure station | 86% | 84% | 80% | 71% |
| Customer satisfaction with helpfulness of platform/concourse customer service staff | 83% | 81% | 79% | 75% |
| Customer satisfaction with friendliness of ticket desk staff at departure station | 85% | 83% | 82% | 72% |

Passengers were more satisfied with the hospitality of NS. This is always a focal point for our employees on the train and at stations. For example, we have coached customer service staff in how they can provide service to customers proactively. Managers have spent more time in the field and are assisting their staff on the subject of hospitality. We also improved the information provided by conductors about disruptions and we experimented with a more personal style of broadcasting announcements in the train. This has resulted in a higher score from passengers. We will expand the new approach nationally in the coming year.

The train experience

| Train Experience Monitor | Train | Train journey |
|--------------------------|-----------------|-----------------|
| Intercity | 86% (2017: 84%) | 87% (2017: 85%) |
| Sprinter | 84% (2017: 79%) | 86% (2017: 83%) |

Every year, the Train Experience Monitor measures the scores that 30,000 passengers give for the quality of the trains and one recent journey. This helps us improve our services to our passengers. Passengers' assessments of Intercity trains improved slightly due to the influx of modernised Intercity trains (VIRMm1). In 2018, 86% of our passengers gave a score of 7 out of 10 or higher for the Intercity compared to 84% in 2017. The assessment of the Sprinter trains saw a clear rise: from 81% in 2017 to 84% in 2018, largely due to the introduction of new FLIRT-type Sprinter trains.

Clean trains

NS wants its passengers to be able to travel in clean trains. That is why we clean the interiors daily. Last year, 68% of passengers gave the cleanliness of trains a score of 7 out of 10 or higher (62% in 2017). We concentrated last year on making sure trains are clean when they start in the morning. With sector partners we worked on a more reliable logistics plan to ensure that trains arrive at the cleaning locations on time and that they leave clean and on time. Trains are also cleaned while in service, and train toilets are cleaned better. Furthermore, we improved the cleaning of the floors in the modernised double-decker. Cleaning the outside of the trains remains a point for attention. Trains often do not pass through the washing machine due to the tight logistical schedule. NS is working on innovations that make it easier to remove dirt from the outside of trains, such as foil. We have not yet implemented that innovation because of fire safety standards. We did a test with nano-coatings on trains last year. When the results are in, we will decide whether or not we can follow this up.

Improved journey information

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|---|---------------------|---------------------|------------------------|-----------------------|
| Information on the train and at stations about delays | 85.2% | 83.2 % | 75.0% | 80.0% |

NS wants to give passengers more control over their door-to-door journey, irrespective of the means of transport or the carrier. Journey information plays a key role in this. This information has to be correct, frequent, in time, consistent and up-to-date so that passengers can make better choices. Every year, NS issues more than 500 million journey recommendations about door-to-door travel, engineering work and disruptions. In 2018, we gave timely information about disruptions on the train and at the station in 85% of the cases. That percentage was higher than in 2017 (83%). More use of automatic announcements at the station resulted in more timely, clearer and more consistent journey information during disruptions. The centralisation of the teams for the operation of signs and announcements at the station resulted in a clear working method and higher quality. Based on information by ProRail about adjustments to the timetable, we give the passengers a forecast of how long the disruption is expected to last.

The latest departure times of buses, trams and the metro on screens in the public transport service centres at the station were improved this year with regard to contents and display, facilitating better connections to other modes of transport. NS staff can provide door-to-door travel advice with the NS app, including about other train and bus companies. The contract for the replacement bus service was also renewed at the end of 2018. The new contract now includes tracking the buses in real-time, which makes it possible to provide up-to-date journey information.

NS app improvements

In 2018 NS further developed the information in the NS app. Based on their personal preferences, passengers receive alerts about their route before and during the journey. The NS journey planner provides up-to-date advice on public transport journeys, covering the bus, tram and metro in addition to the train journey from station to station. The app does not yet give rail passengers alternative travel options when there are disruptions. We want to remedy this in 2019.

Journey information during the train journey

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|--|---------------------|---------------------|------------------------|-----------------------|
| Journey information during the train journey | 85.0% | 84.7%* | 81.4%* | 83.1% |

* For 2018, this indicator was changed due to technical adjustments to the calculations and a change in the reference point; see explanation

The 'Journey 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. Performance in 2018 (85.0%) was better than in 2017 (84.7%). In the past year, NS has made timely announcements of platform changes and delays a key variable in the management information for train service leaders. The journey information analysts were also trained to give speedier and more timely warnings.

Customer Service and social media interaction

| Number of contacts per month | Social media | E-mail | Telephone |
|------------------------------|--------------|--------|-----------|
| | 86,621 | 25,157 | 153,484 |

Passengers who contact us online or by phone rate our services better than passengers who send a letter or an e-mail. This is because online contact or a telephone call often immediately results in a solution. In 2018, 76% of customers gave the services of the Customer Service department a score of 7 out of 10 or higher (75% in 2017). Passengers especially appreciate the Livechat function. We have expanded the chat function, for example with the possibility to include attachments so that we can support our passengers even better and increasingly resolve the issue in one go. The times at which the chat option is available were extended. Via the NS app we did a test with possibilities for passengers to give spontaneous and requested feedback, and for employees to receive and act on this feedback immediately.

Personal safety

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|--|---------------------|---------------------|------------------------|-----------------------|
| Customer satisfaction with personal safety on the train and at the station | 90% | 88% | 81% | 83% |

Customers' perception of safety at stations and in trains improved in 2018: 90% gave a score of 7 out of 10 or higher, as opposed to 88% in 2017. Last year we took additional measures to improve personal safety further, such as using cameras and deploying Safety & Service staff and private security staff at stations where passengers feel unsafe and where there is a problem with crime or people being a nuisance. We cooperate closely with the police, municipalities and other carriers. With our partners we made agreements in so-called safety arrangements to carry out joint actions to increase the level of safety. For example, as of 2017 there are two guards after 22:00 on trains on the evenings when a lot of people go out; on other evenings, we deploy what are known as 'flexible service and safety teams'.

Incidents involving aggression

Aggression incidents cannot be prevented, but each and every incident is one too many. NS encourages staff to report all incidents involving aggression. Extra attention was given to this in October, during the Safety Week. Within NS as a whole, 802 incidents of category A aggression against staff were reported in the past year. Many of the category A incidents involved some form of threat (285), and physical violence was involved in 222 incidents. There was also resistance (183), spitting (93), threatening with a weapon (12) and 7 cases of indecent assault. Of the uniformed staff, 753 employees were involved with some form of physical aggression. This was 17% higher than in 2017 (642).

Closing the gates at stations shifts incidents away from the trains and onto the stations. The percentage of employees who are involved in aggression connected to fare dodging is falling. That is an issue in particular in trains. On the other hand, there is increasing cause to address people because of their behaviour and for not keeping to NS's rules. This is mainly an issue at stations, both due to abuse of the access gates and due to nuisance behaviour and other violations of NS rules. The number of category A incidents involving aggression on the train decreased by 15% compared with 2017. The number at stations has gone up by 21%. 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 206 injuries as a result of aggression against staff in 2018 (183 in 2017). These

were mostly minor injuries (91%). 193 cases involved uniformed employees (183 in 2017), of which 76% of the injuries were incurred by Safety & Service staff.

As a measure to cut the number of incidents, NS rolled out the body camera for Safety & Service employees and security guards in the second half of 2018. The body cam adds to the feeling of safety experienced by passengers and staff, and has a de-escalating effect in difficult situations.

International connections

Together with its international partners, NS connects the Netherlands to major cities and regions in Germany, Belgium, France and Britain. Last year, the number of international train journeys grew by 10% to over 3.5 million.

Intercity Brussels

Since 9 April 2018, the Intercity Brussels service runs on the high-speed line. The train runs 16 times a day: 12 times a day to and from Amsterdam Centraal, and 4 times a day to and from Den Haag Hollands Spoor station. Now that the Intercity Brussels service runs on the high-speed line, passengers between Amsterdam, Schiphol and Belgium have half an hour less travel time and Breda has a direct connection to Belgium.

Thalys

Even more Thalys trains are running with double train sets, which has increased the number of available seats to and from Paris since December 2018. As of April 2019, the Thalys will stop twice a day at the new destinations of Charles de Gaulle airport and Marne-la-Vallée/Disneyland. To make this possible, the direct Thalys connection with Lille was stopped in December 2018.

ICE International and Intercity Berlin

The main focus for much of 2018 was on developing a more attractive service to Germany together with our partners. The Ministry of Infrastructure and Water Management had a survey carried out of the options for specifically improving the connection to Berlin. The focus in 2019 will be on fleshing out this phased improvement. That fits with our ambition to make international trains an attractive alternative for flights within a distance of 700 kilometres.

Eurostar

Since 4 April 2018, Eurostar has run a direct train link from London to Amsterdam via the HSL South. The construction of terminals at Amsterdam Centraal and Rotterdam Centraal has finished, but the journey from the Netherlands to London will for now involve a change at the Eurostar Terminal in Brussels for the passport and luggage checks.

Eurostar and NS are in discussions with the relevant authorities, which have committed themselves to aiming to reach an agreement on the legal framework for passport control in the Netherlands by the end of 2019. Eurostar has announced that a third train will be added every day between Amsterdam and London from June 2019.

Ease of payment in public transport

Through the public transport payment programme, we want to offer customers more choice and convenience when paying for their train journeys. In the future, passengers will also be able to check in and out using, for example, their debit card, credit card, mobile phone or maybe even their smart watch, in addition to the public transport smartcard. In 2018 we collaborated with all carriers, Translink and public authorities to reach agreements on the introduction of new payment methods and the development of the necessary technology. The first steps have been made this year with, among other things, the introduction of NS Flex. This allows passengers to travel on account and pay for their train journeys later. The intention is for NS Flex to be expanded in the coming year with products and functionalities such as family packages and joint journey discounts.

In December it was decided to start a pilot for travelling with bank cards from January 2019. Starting mid-January, the first passengers can pay for their NS journey by checking in and out using their debit card. The pilot project is on one route and will last six months in total. The results will be input for the decision on whether to roll this payment method out nationally. Another test, by the NOVB, investigated checking in and out once only: passengers then do not have to check in and out again when changing to another carrier. The NOVB concluded that the introduction of checking in and out once only has no place in the current public transport smartcard world. We are looking with other carriers into further implementation of travelling with location determination (known as Swipe & Go).

Group ticket

Since January groups of passengers who go on a trip together can use the Group ticket. This ticket type replaces the Group Return, which was misused by intermediaries, for instance, who earned money from reselling the tickets. The new ticket makes the return journey more flexible. The whole group does have to travel on the same train from now on.

'Better and More': developments on and around the track

In the programme 'Better and More', NS and ProRail have been collaborating on improving performance on the tracks. To make travelling by train more attractive, a more reliable train service is needed ('Better') along with increased frequencies ('More'). One aspect of 'Better and More' was the 'Approach to Train Improvement', in which we worked to produce a high-frequency service between Eindhoven and Amsterdam. This aspect was completed in 2018 with the introduction of the 'ten-minute trains' between Eindhoven and Amsterdam. In 2018 the programme element 'Adjusting and Controlling the Future' focused on restoring the train service as quickly as possible after a disruption.

Pleasant use of time

NS wants passengers to experience their journey time as their own time that they can make good use of wherever possible. NS works on this together with the public authorities, knowledge institutions, partners within the rail sector, suppliers, design agencies, designers and passengers. In 2018, for example, NS developed new digital functionalities and included them in the NS Lab app for a small group of test users. Tested features include MindfulNS, a railway quiz and podcasts. In 2018 we also developed a joint vision of the train interior of 2025 with architectural firm Mecanoo and interior supplier Gispen. A draft design of this vision was worked out in the form of a Virtual eXperience Lab and shown at the Innovation Expo and Dutch Design Week.

Also new in 2018 was the Inspiring Journeys programme. In this programme we work together with partners on services and facilities that aim to improve the door-to-door journey.

Innovations

NS wants to be the frontrunner of sustainable mobility with an attractive product. We encourage employees, sector partners and stakeholders such as suppliers to collaborate with us in developing new technologies, services and products that will improve the service we provide to passengers. The new Innovation Board is in charge of coordinating the innovations.

Driving advice for drivers

Drivers get support with information about the speed the train should be going at, resulting in fewer unnecessary red signal approaches and delays. In 2018 the Rolling Time Advice system was further improved with, among other things, more accurate position determination and the addition of the train type. The roll-out is expected in 2019.

Smartwatch

In 2018, conductors tested working with a smartwatch. Via a special app, the conductor gets a vibrating signal shortly before departure so that the departure process starts on time. The smartwatch counts down so that the train can depart at the exact time, down to the second. The app means that the conductor has the same departure time as the driver, allowing them to cooperate even more effectively on the train. The roll-out of the smartwatch is planned for 2019.

Deploying trains based on public transport smartcard data

Since December 2018, we have been planning the use of trains in part based on data from public transport smartcards. The data gives us a picture of how we can deploy trains at the same cost in such a way that they offer our passengers an improved chance of getting a seat. The SLT-type Sprinter trains have been running this way since the summer.

We also launched the Seat Searcher feature in the NS app. It indicates where in the train you can expect to still find empty seats. That expectation is based on public transport smartcard data and on the measuring points giving the weights on the railways. The Seat Searcher was tested on the Arnhem-Den Bosch route and is now also available on other routes. We are working on a national roll-out.

Public transport guide for personalised journey advice

In 2018 NS launched an app for a group of test users with personal, up-to-date and relevant journey information during the door-to-door journey. In this app users can place their planned journeys in a journey calendar. Before and during the journey they receive up-to-date information about the next journey step. For six stations on the 'A2 corridor' (between Amsterdam and Eindhoven), they can use a station plan with pedestrian routes.

Operational performance



We want to offer passengers a rail service that meets their requirements by giving them a seamless and reliable door-to-door journey, in cooperation with our partners.

Punctuality on the main rail network

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|--|---------------------|---------------------|------------------------|-----------------------|
| Punctuality for passengers (to 5 minutes) on the main rail network | 92.6% | 91.6% | 88.9%* | 91.1% |

* For 2018, these indicators were changed due to technical adjustments to the measuring system; see the explanation here.

NS wants passengers to be confident that they will arrive at their destination at the scheduled time. We use the 'punctuality for passengers' performance indicator to measure the punctuality in a way that also looks at whether they made their connections. Punctuality for passengers (to 5 minutes) for the main rail network was higher than ever in 2018: 92.6% (2017: 91.6%). Record numbers of passengers reached their destinations on time. A statistic that is related to punctuality is the number of 'good train days', ones on which more than 90% of the trains run on time. Whereas the trains ran on time on 218 'good' days in 2017, this figure was 258 days in 2018.

The reason for these good scores can be found in the redesign of the timetable in 2017 and the increased frequency of the trains between Eindhoven and Amsterdam. The introduction of this frequent service went smoothly thanks to the careful preparation together with ProRail. In general the changes in the timetable went better than last year, so there was little or no deterioration in performance. In 2018 NS also tested innovations that can further increase punctuality, like the boarding zones, driving advice for train drivers and countdowns at crossings.

Influence of the weather on punctuality

Sometimes the weather throws a spanner in the works. On 18 January a strong storm resulted in the train traffic having to stop because the safety of passengers could no longer be guaranteed. Between April and August there were faults with the trains and the track due to the hot weather. The punctuality was also lower in certain places in February, July and August due to work on the tracks, including in Zwolle, Zaandam, Weert and Gouda. On the other hand, the usual autumn decrease in punctuality was limited last year.

Punctuality for passengers to 15 minutes on the main rail network

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|---|---------------------|---------------------|------------------------|-----------------------|
| Punctuality for passengers (to 15 minutes) on the main rail network | 97.7% | 97.4% | 96.7% | 97.3% |

Punctuality for passengers to 15 minutes on the main rail network was 97.7% in 2018 (97.4% in 2017). This KPI has never been this high before. Just like with punctuality for passengers to 5 minutes, the introduction of the new timetable had a positive effect on the punctuality. We also implemented changes afterwards to improve some changeover options. More attention was given to the routes that scored lowest on this KPI, including the HSL trains. Sometimes small improvements in the timetable during the year can result in further improvement in the reliability for passengers.

Punctuality on the HSL South

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|---|---------------------|---------------------|------------------------|-----------------------|
| Punctuality for passengers on HSL South | 82.5% | 83.5% | 82.1%* | 84.1% |

* For 2018, these indicators were changed due to technical adjustments to the measurement system.

Punctuality for passengers (to 5 minutes) was 82.5% in 2018 (83.5% in 2017). There was an anticipated decline after the introduction of the Eurostar and the IC Brussels, which started running on the HSL in 2018. In addition, in 2018 the software was updated by the supplier of the HSL trains. However, this update did not bring the desired improvement in performance due to an error in this update. Trains ended up briefly stranded as a result, and this is reflected in lower punctuality figures in the second half of 2018. It was not possible to correct the error in 2018 and that work will continue in 2019. Despite the poorer performance, NS achieved the minimum value for this KPI in 2018.

NS and ProRail continue to pay constant attention to the performance of the HSL South. A long-term vision for the HSL South to make lasting improvements to performance on this line was submitted to the ministry.

Quality of NS connections to other carriers

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|---|---------------------|---------------------|------------------------|-----------------------|
| Quality of NS connections to other carriers at the major hubs | 95.8% | 95.0% | 94.0%* | 95.6% |

* For 2018, these indicators were changed due to the increase in the number of stations where measurements are made.

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 changeover stations. The number of transfer stations where measurements are made was increased from 18 to 27 in 2018. In 2018, the score for the quality of connections to other carriers was 95.8% (95.0% in 2017). Just like punctuality for passengers, this indicator shows that the new timetable is easy to operate and the connections to other carriers are in order. Where possible, the timetable is adjusted throughout the year to achieve better connections.

Chance of getting a seat on the main rail network

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|--|---------------------|---------------------|------------------------|-----------------------|
| Seat availability on the main rail network | 95.1% | 95.0%* | 94.3% | 95.5% |
| Top ten crowded trains | 2.5% | 2.4% | 4.9% | 4.0% |

* This figure was adjusted by 0.1% following physical recounts of the seats in trains.

Passenger-kilometres grew by 2.4% in 2018, partly because of the upturn in the economy. That is why trains are getting increasingly crowded, especially in the traditionally busy autumn period. NS aims for passengers to be satisfied with their chances of getting a seat. We adjust the availability of the rolling stock and the number of available seats to suit their needs where possible. In 2018, 5,000 seats were added to our trains, in part due to new trains. With new rolling stock we can make trains longer and increase frequencies. However, it is unrealistic to expect everyone anywhere to have a seat in peak periods.

Increasing the chance of getting a seat at peak times remains a major challenge. There is pressure on the performance figures due to the increasing passenger numbers. We are also coming up against the limits of infrastructure capacity, and the limited availability of combining and handling capacity will eventually result in restrictions. Increased passenger numbers are leading to crowded platforms at some stations, for example. In the long term the solution is to increase the platform capacity; in the short term we are taking measures together with ProRail such as having staff on the platforms or LED screens for help with fast and spread-out boarding. We also introduced the Seat Searcher (*ZitplaatsZoeker*) in the NS app last year.

Seat availability at peak times on the main rail network

Seat availability at peak times on the main rail network was 95.1% in 2018. That is 0.1% higher than in 2017, despite growing passenger numbers. With the timetable for 2018, NS has more seats available on the Eindhoven-Venlo and Amersfoort-Rotterdam/The Hague routes. In 2018, NS and ProRail implemented the increase in frequency from four to six Intercity trains per hour between Eindhoven and Amsterdam. This frequency increase helps us provide more transport capacity during the busiest peak periods.

In addition to an increase in frequency, we informed passengers about the crowding per train so that they can consider taking quieter trains when planning their journey. We ran trials with extra discounts for passengers who avoid peak hours. The trial shows that price incentives are an effective measure to relieve the main peak. The draft Climate Agreement (21 December 2018) states that in 2019 NS will make a proposal together with the Ministry of Infrastructure and Water Management for a pilot on controlling demand, including through price incentives. Other transport carriers and consumer organisations will be involved in this. We also looked for solutions with stakeholders for crowded trains at the busiest times during the rush hour. For instance, the HAN University of Applied Sciences in Arnhem and Nijmegen, Radboud University and the Nijmegen ROC college changed their lecture times in 2018. Finally, NS is working on being better at implementing the timetable according to plan and having more trains available in the right place at the right time.

Despite all the efforts, the expectation is that trains will still be crowded during peak times in the coming period.

Chance of finding a seat in the top 10 busiest trains

For the top 10 busiest trains, the score was 2.5% in 2018. This was 0.1% lower than in 2017. This percentage is the probability of a passenger being unable to get a seat on one of the preselected 10 busiest routes during the rush hour. Passenger growth and the lack of options for extending trains led to some connections scoring more poorly than in 2017.

Seat availability at peak times on the HSL South

| Performance indicator | Realisation in 2018 | Realisation in 2017 | Minimum value for 2018 | Target value for 2019 |
|---|---------------------|---------------------|------------------------|-----------------------|
| Seat availability at peak times (HSL South) | 94.0% | 96.0%* | 91.2% | 94.9% |

* This figure was adjusted by 0.8% following physical recounts of the seats in trains.

Seat availability at peak times on the HSL South was 94.0% in 2018. This is lower than in 2017 (96.0%). The reason for this was the substantial passenger growth of 15% on the route between Amsterdam and Rotterdam.

The IC Brussels train was extended from six to seven carriages in the first six months of 2018. In August we extended the peak-hour train between Breda and Amsterdam by three carriages so many more passengers can have a seat. We also took additional measures to improve the journey information. Passengers are informed about the crowding on specific trains when planning their journey so that they can make different choices. This is done for instance via the crowding indicator in the NS app. We also offer a discount on the IC direct surcharge for passengers who avoid the peak period. Staff on the platforms encourage a better spread along the length of the train and Safety & Service staff keep out fare dodgers.

The strong growth in passenger numbers on the HSL South remains a challenge for NS. Cancellations and delays in the busy peak-hour trains directly affect many passengers. A day with delays and cancellations on the HSL South immediately has a huge impact on this performance indicator due to the relatively small number of trains. NS and ProRail are targeting a reduction in cancellations and delays via an improvement programme. Despite the challenges that come with the growth in passenger numbers, we performed above the minimum value in 2018.

Capacity growth

Passenger numbers are expected to keep growing in 2019. By adding one extra train per hour from December 2018 and by increasing the length of every Intercity direct train with an extra carriage (from the beginning of 2019), we are achieving an increase in capacity of almost 20% for 2019: there are 850 more seats available for passengers every hour. This means that the maximum capacity of the NS trains on the HSL South has been reached for now. However, the expected growth in passenger numbers is even greater so passengers will still experience crowded trains. Starting with the 2021 timetable, the New Generation Intercity trains ordered by NS will start running on the HSL South. In December 2018, the IC Brussels became the fifth service to run on the HSL South in addition to the four domestic services. As a result, more capacity has become available here too, which will increase seat availability.

New and upgraded rolling stock

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 purchasing, refurbishing and upgrading trains, largely in response to growing passenger numbers. Proven technology, sustainability and convenience for passengers have the highest priority. Passengers experience more seating and greater comfort because the availability of trains has increased. The investment in the procurement and upgrading of rolling stock totals €3.5 billion for the period to 2022.

Upgrading Intercity trains

NS will be upgrading a total of 80 double-decker trains (VIRMm1) with 415 carriages in the period through 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. These trains will get comfortable seats, modern lighting and recharging facilities in both first and second class, and art. The first modernised trains from this series will start running in 2021.

Upgraded Sprinter trains

In August the first upgraded Sprinter trains (SLT type) with toilets and retractable steps started running on the track. The upholstery of all the chairs in these trains was also renewed. Up to the end of 2018 we worked on building experience in renovating these trains, after that we started the conversion of the entire series. In 2019, all SLTs will be getting new, artificial leather upholstery. The expectation is that all 131 train sets will have been renovated by the end of 2021.

New Sprinter trains

The first of the 118 new Sprinters ordered from the Spanish train manufacturer CAR started running on the track on 9 December 2018. The trains are being introduced in the timetable gradually in the north and west of the country. In December 2018 NS ordered 88 more Sprinter trains from CAF. This means we are expanding the number of seats by a further 15,000. The investment involved in this is approximately €400 million. This order takes the total NS investment in new and upgraded trains to around €3.5 billion.

Opening of the new Intercity production hall

In November train manufacturer Alstom opened the production hall for the New Generation Intercity trains in Poland. These are the new, fast NS Intercity trains that will run from 2021 onwards. The first trains will be leaving the factory in 2019, which is when the process of testing, authorisation for use and training will start. These fast single-decker trains (maximum 200 km/h) are suitable for both conventional tracks (the main rail network) and the high-speed line. There will be 25,000 extra seats in total. With toilets that are accessible for wheelchairs, Wi-Fi, journey information screens, separated waste collection, LED lighting with Intelligent Light Control, (USB) sockets in 1st and 2nd class, retractable steps for better accessibility and extra baggage space, the train has everything you could want during the journey.

Our trains

| | Number of carriages as at 1/1/2019 | Seating capacity |
|--------------|---------------------------------------|---|
| SGM | 87 | 16,866 |
| SLT | 131 | 34,562 |
| SNG | 28 | 4,965 |
| DDAR | 17 | 7,329 |
| FLIRT | 58 | 10,564 |
| ICRmh | 36 | 22,355 |
| VIRM | 176 | 86,773 |
| ICMm | 137 | 34,562 |
| DDZ | 50 | 23,224 |
| ICNG | 0 | 79 trains ordered. Will come into operation in 2020–2022. |
| DDM1 | 9 | 5,292 |
| Total | 729 | 246,756 |

Availability of trains

NS withdrew an average of 12.4% of the trains for maintenance, repairs and refurbishment on any given day in 2018 (11.4% in 2017). This means that we performed better than the norm of 13.3% per annum and that we met the target that is needed for the timetable. The main reasons for the increase were the additional withdrawals for upgrading the rolling stock and making further improvements in rolling stock performances. We are working on further lowering this percentage in order to increase the number of seats for passengers.

Real-time monitoring

NS measures the conditions of the rolling stock with sensors in the train. This way we can immediately see how the train is doing, for example whether there is an impending fault or whether a train has to go to a maintenance location for restoration work. Because we can look in real-time, the driver can also get better and faster advice if there is a fault and thus limit the delay. Last year, NS implemented technical real-time monitoring for the first train series; from 2019 onwards we will start using it, and more train series will follow. This covers over 350 existing trains and all new rolling stock that comes in.

Cooperation during planned or unplanned interruptions to the service

It is very important that the tracks are properly maintained and improved. This can however cause hindrance for passengers. In March, train traffic was subject to restrictions in the Rotterdam region for three weeks. In February, July and August there was replacement bus transport due to work on the tracks in Zwolle, Zaandam, Weert and Goes. We work closely with ProRail and the other carriers to limit hindrance and offer passengers alternative transport if possible. We also inform passengers about planned interruptions to the service proactively and in good time, for example via the website and the NS app. Work on the tracks is mostly done at night, over the weekends and in holiday periods.

This will continue to be an issue over the years to come. NS is working with ProRail to make the Randstad conurbation properly accessible during planned work in the city of Amsterdam. Our intention is to not further increase hindrance for passengers.

2019 Timetable

The 2019 timetable is virtually identical to the 2018 timetable. Trains were made longer on a number of routes due to the anticipated growth in passenger numbers. 206 new Sprinter trains are also being phased in until the start of 2023. Furthermore, additional trains have started running from a number of stations. From 2019 onwards, five instead of four Intercity trains will be operated on the high-speed line every hour, seven days a week, between Amsterdam Centraal and Rotterdam Centraal. In the nights of Friday to Saturday and Saturday to Sunday, there is an extra Intercity train on the Den Haag Centraal-Gouda-Utrecht Centraal route.

The journey time has become shorter on a number of routes. Due to better connections at Gouda, the journey time from Gouda to Utrecht Centraal by Sprinter train is nine minutes shorter. Between Woerden and Den Haag Centraal and Rotterdam Centraal, the journey time is eight minutes shorter for half of the connections. There are some routes with a few minutes extra journey time in 2019. This applies for example to the Thalys between Amsterdam Centraal and Schiphol and between Paris and Amsterdam. Due to changed departure platforms and times at Gouda station, there is a small group of passengers who have longer journey times because they have to wait longer for a connecting train.

A new station: Lansingerland-Zoetermeer

The new timetable now sees the Den Haag Centraal-Gouda Sprinter train stopping at the new Lansingerland-Zoetermeer station four times an hour.

Accessibility

NS wants everyone to be able to travel without any problems. We make it as easy as possible for passengers to travel independently and offer assistance where necessary. Accessibility is addressed in the development of new products and services. The majority of the accessibility measures are suggested by the target group itself. When developing measures, we work closely with people with functional disabilities. In June NS introduced a new booking and journey monitoring system for journey assistance. This system makes booking journey assistance easier

and enables customers to monitor the course of their journey. We introduced journey assistance at nine additional stations in 2018. These were the Bloemendaal, Akkrum, Olst, Amersfoort Vathorst, Dieren, Ravenstein, Rilland-Bath, Hillegom and Wormerveer stations. Rhenen station will be added in March 2019. We also started a trial for visually impaired passengers in which they receive assistance at three stations in finding their connecting train or bus.

More and more Sprinter trains have retractable steps. 22.1% of Sprinter trains were independently accessible in 2018 (the target for 2019 is 52.9%). In combination with a platform at the same height, wheelchair users are able to board trains independently at increasing numbers of stations. We give passengers journey information about this.

Railway safety

To improve railway safety, NS has introduced a single harmonised safety management system ('1VBS') for the entire organisation. This creates clear and simple processes, which improves railway safety. The system goes through a continuous improvement process. In 2018 the Human Environment and Transport Inspectorate carried out an audit of the 1VBS for recertification of the various NS train operating companies. We received a new safety certificate.

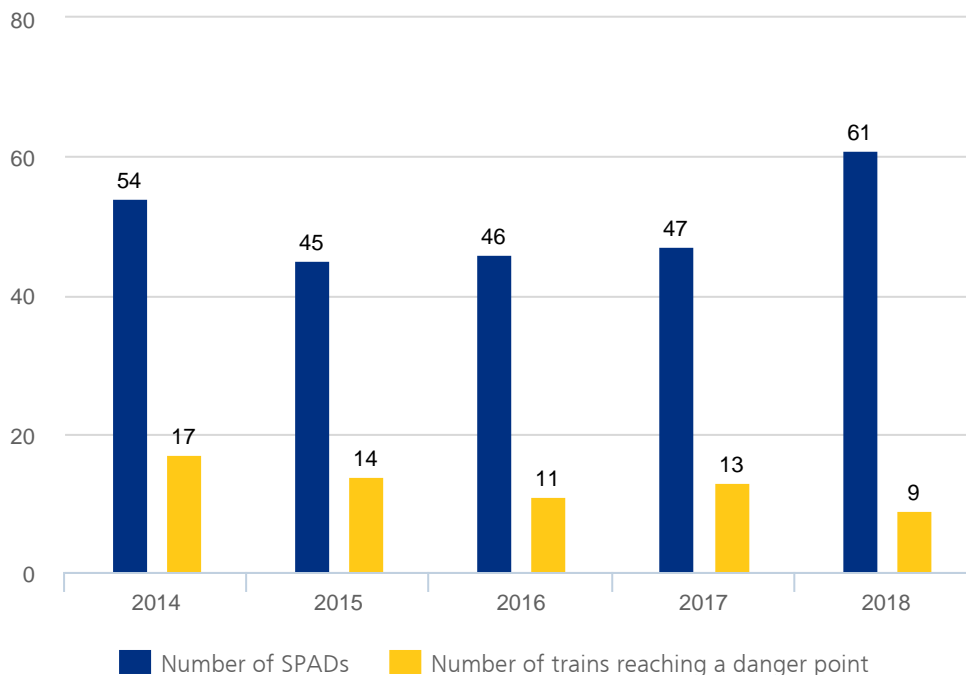
Number of signals passed at danger (SPADs)

The number of non-technical cases of signals being passed at danger (SPADs) is an indicator of railway safety. The number of SPADs was 61 in 2018 (47 in 2017). Almost half (28) of the SPADs in 2018 came from empty trains when shunting and when transferring an empty train from one station to another. NS and ProRail are investigating the reason for this increase.

The number of SPADs of trains with passengers was 33, the same as in 2017. The number of times that what is known as the 'danger points' was reached, such as a switch, decreased from 13 times in 2017 to 9 in 2018.

ORBIT, the system that warns drivers if they are approaching a red signal too quickly, can prevent SPADs. Data from ORBIT also gives insight into high-risk situations and developments so that we can take measures that take effect before an incident takes place. In 2018, NS installed the ORBIT system on the VIRM, ICM, SGM, DDZ and SLT type trains. The installation in SLT trains will continue in 2019.

Five-year trend STS



Braking criterion

NS took the decision in 2017 to make the braking criterion (technically enforcing more powerful braking when approaching a red signal) in IC rolling stock more stringent, starting with the VIRM. In 2018, NS worked this decision out in more detail to determine when alterations to the VIRM trains and timetable would be possible.

Last year the improved version of the ATC automatic train protection system was installed at various locations. Additionally, in 2018 we continued research on the impact of workloads and distractions. We have prepared eye-tracking studies and simulator studies. This gives us insight into the impact of devices, such as tablets in the cabin, on the viewing behaviour of train drivers. The studies will be carried out in 2019.

Running trains with ERTMS

The European Rail Traffic Management System (ERTMS) is a European train safety system that is being introduced on the Dutch railways. It increases the ability of different systems to communicate with one another and improves the safety and reliability of the train service. The State Secretary of the Ministry of Infrastructure and Water Management has announced that the programme decision in 2018 is being postponed because the schedule that had been drawn up is not feasible. Making design decisions with supporting arguments, drawing up documents and making agreements with rail sector parties is taking more time than originally estimated. Only then can NS start the procurement process and then install the system in the trains. Additional measures remain necessary as some parts of the infrastructure do not have ERTMS yet.

Energy

NS is one of the biggest electricity consumers in the Netherlands. We use 90% for running the trains and 10% for our buildings. Our aim is to be climate-neutral by 2020. That is why we want to use energy as responsibly as possible.

CO₂ emissions

As of 2017, travelling by electric NS trains in the Netherlands results in no net CO₂ emissions. The electricity needed to run the trains is generated by wind farms in the Netherlands, Belgium and Scandinavia. NS also no longer runs diesel trains for passenger transport. If buses are required in emergency situations, they do result in CO₂ emissions. We also measure the emissions of replacement bus transport. The measured emissions include the distance between the normal parking location and the place where they are deployed. Overall CO₂ emissions from transport at NS totalled 0.5 grams per passenger-kilometre in 2018 (2017: 1.0 g per passenger-km). In 2018 NS completed the tendering procedure for climate-neutral replacement bus transport in the Netherlands and signed an agreement with two bus companies. As of 1 January 2019, the buses that NS deploys to replace trains run on organic fuel based on waste and residual flows. As a result, as of 2019 the journey at NS is always completely climate neutral.

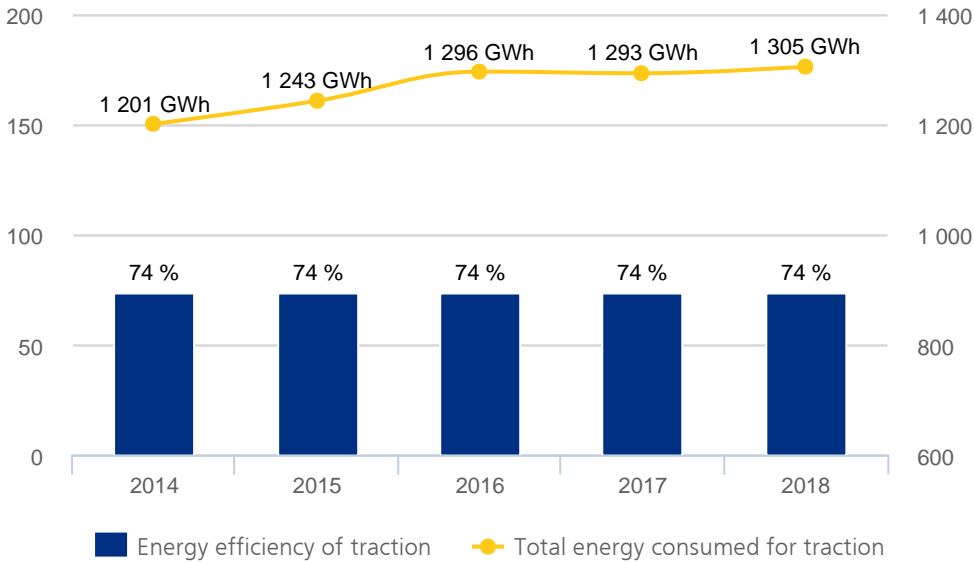
In addition to the trains, in 2017 the electricity used in all NS buildings in the Netherlands became completely 'green' as it was generated by wind power. Of the gas used in our buildings, 50% was purchased from green sources and it will be fully climate-neutral by 2020. In 2018 we emitted direct emissions (scope 1) in the Netherlands through the gas energy consumption in our buildings and fuel consumption by our buses. This amounted to 14.1 kilotons of CO₂ (25.6 in 2017). Indirect emissions (scope 2) as a result of the consumption of heat in our buildings were 0.6 kilotons of CO₂ (0.6 in 2017). At the start of the franchise in 2015, these CO₂ emissions were 77 kilotons (scope 1) and 487 kilotons (scope 2) respectively. In total, we have therefore avoided over 0.5 megatons of CO₂ emissions since then.

Energy consumption

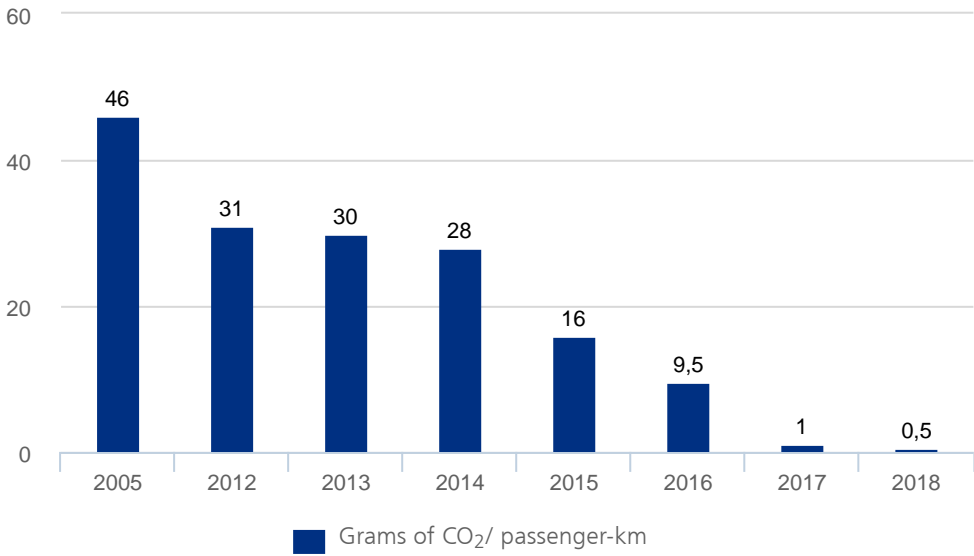
NS consumes electricity (1,358 GWh), diesel (3.2 million litres), heat (36.6 TJ) and gas (6.5 millionm³) as energy resources for trains, buses, stations, workshops and offices. When converted to GWh, this equates to 1,457 GWh in energy, of which 1,386 GWh is green energy. With our thermal storage system, we generate the equivalent of 24 GWh of heat and cold.

In 2018, an average of 71.3 Wh of energy was used per passenger-kilometre for journeys with NS. This is less than in 2017 (71.6 Wh/passenger-km). Even so, we did not achieve our target for the improvement in energy efficiency. That is partly due to our efforts to offer passengers more seats (in peak periods): we put on more trains and temporarily used older, less energy-efficient rolling stock. Due to the influx of new and upgraded rolling stock and a slightly higher occupancy rate we were able to achieve a modest improvement in energy efficiency.

Energy consumption of NS trains in the Netherlands (electricity, diesel, including replacement bus transport converted to GWh)



Gram CO₂ emissions per passenger kilometer NS train transport in the Netherlands



Promoting the recycling of materials, reducing waste

NS uses a lot of materials in trains, workshops, stations and offices. Our goal is to use these materials economically and give them a second life when we part with them. For trains and public transport bicycles, for example, we look whether they can continue a little longer after an overhaul. When we dispose of products or parts, we look at whether it is possible to use them somewhere else. If not, we ensure the materials are recycled. Our ambition is for NS to have an entirely closed cycle. We aim to achieve this for example by:

- reducing the use of materials
- putting circular-economy procurement into practice when purchasing materials
- investigating service life extension
- separating waste: separating what we have to at the source and what we can after use



- finding a market for discarded materials
- organising process ownership (waste managers)
- collaborating with key stakeholders such as suppliers and ProRail

'Circularity' of our trains

The materials in the NS trains need replacement after about 20 years. After upgrades, the same train can go back into service again for another 20 years or so. NS is now upgrading the VIRM type double-decker trains. We reused 86% of the 'old' train, including the body shell, doors, screens, stairs, etc. The remaining components were collected and separated out as much as possible for recycling: rubber fittings around the windows are used for rubber play tiles, the side walls and luggage racks for dyke/shoreline reinforcement.

A total of over 97% of the materials in the train are given a new lease of life this way. We are still looking for an application for the remaining 3%, including floors, ceilings and upholstery parts. For example, we are investigating whether it is possible to make desks for our offices from the floor boards.

Trains are taken out of service after about 40 years. We then first try to sell the entire train. If this is not possible, we disassemble the valuable train parts for reuse in other trains and for the TechniekFabriek ('technology factory'), the training establishment for NS technicians. We pass on some valuable components to charity. In 2018, we reused 64,000 kilograms of material. We then proceed to closed-cycle demolition of the train where as many of the materials as possible are converted to new valuable raw materials, for example the fluorescent lighting, rubber fittings around the windows and metals. We incorporate the lessons and experiences from upgrading and demolition in closed-cycle specifications for the procurement of new trains.

Waste reduction

In addition to the scrap trains NS had around 18 million kilograms of waste in 2018 (around 18 million kilograms in 2017). NS encourages waste reduction by asking passengers to leave their newspapers in the luggage rack after reading them. If multiple people use the same newspaper, the total number of copies could be reduced. Since October 2018, passengers get a 25 cent discount on hot drinks at 200 shops at the station if they bring their own reusable beaker. In 2018, NS started placing water taps at stations which they can use to fill their own bottles. This reduces plastic waste.

Waste recycling

Staff at our workshops were able to separate 81% of the waste in 2018 (81% in 2017). 4% of our waste is removed as hazardous waste annually. 32% of our waste from stations and trains was separated before collection (25% in 2017). Passengers can separate waste paper at 15 stations and in all trains. Our retail staff separates paper and cardboard at 100 stations. At seven stations they also separate out organic waste and food remains for bio-fermentation. Part of our waste was separated out at a post-separation plant.

In total in 2018, 45% of waste was separated in the offices, workshops, stations and trains and offered for recycling (42% in 2017). Ultimately our waste processing companies managed to recycle 44%, and 56% was incinerated for energy production. A very small fraction of our waste (0.2%) has to be dumped in landfills.

World-class stations



Stations are hubs for mobility and quality of life. They are places you arrive at, depart from or linger for a while. We offer a range of facilities at stations so that visitors can spend their time there comfortably and make the most of that time. The station experience accounts for 25% of the customer satisfaction score.

The station experience

NS Stations is revitalising and refurbishing stations, investing in additional services and facilities for passengers. 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 starting point in all this. Depending on the station size, NS Stations offers visitors various facilities that make their stay pleasant and let them make optimum use of their time, with approachable and hospitable employees, journey information about public transport as a whole, good access and easy transfers to bus, tram, metro and public transport bicycle. In 2018, the upward trend in customer satisfaction nationwide with stations continued: the percentage who gave a score of 7 out of 10 or higher increased to 76% in 2018 (2017: 73%). The major stations received a score of 80% in 2018 while smaller stations scored 67%.

| | 2018 | 2017 | 2016 | 2015 | 2014 |
|---------------------------------------|------|------|------|------|------|
| Customer satisfaction survey stations | 76% | 73% | 70% | 67% | 65% |

Hospitability and a pleasant stay

In 2018, NS Stations and its partners once again made improvements to numerous stations. We have invested in facilities that improve the level of hospitality, including facilities at small stations. Examples are the improved amenities for storing bicycles and parking cars, and facilities where visitors can pleasantly spend their time at the station. We looked for suitable solutions for vacant premises at the station to improve the experience and personal safety while retaining the distinctive character of the property and taking proper care of our heritage. Geldermalsen station has been completely refurbished, for instance. Since 2016, every station has had a station manager, someone who is responsible for all the services to our passengers, lessees and stakeholders and for keeping the station clean, undamaged and safe.

Improved waiting area facilities

In 2018 the waiting area facilities at 19 stations were tackled. We opened Station Living Rooms (*StationsHuiskamers*) at Heerhugowaard, Alphen aan den Rijn, Den Helder, Assen and Goes, bringing the total number of stations with a Station Living Room to 17. The Station Living Rooms offer visitors a pleasant space with facilities such as coffee, sockets, toilets and journey information. The new Station Living Rooms at the five stations mentioned are housed in premises where Kiosk shops used to be. The former Kiosk employees are now the hosts at the Station Living Room and an important point of contact for passengers. In 2019, we will be converting around seven Kiosk outlets into Station Living Rooms, mainly at smaller stations throughout the Netherlands.

At Cuijk station, the waiting room in the station building from 1882 has been renovated. Characteristic elements and structural features have been restored to their former glory. Visitors who want something to eat or drink can go to the new cafe.

Toilets at 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 recognisable quality and a clear service concept. At 21 larger stations, NS Stations awarded responsibility for the toilets to Sanifair through a franchising tender. In 2018, we opened a new Sanifair site at the Den Haag Hollands Spoor station. The toilets, which include a disabled toilet, a 'night-time toilet' and a family room, are located at a point that allows for the planned new transfer tunnel. A new Sanifair toilet facility was opened at Tilburg station at the end of July and the construction of a third location at Amsterdam Centraal station started after the summer.

Water taps at stations

NS wants to offer public transport passengers free drinking water at all Dutch train stations. That is why NS has started installing drinking water taps at 222 stations in the Netherlands. The first tap, at Alkmaar station, came into use at the end of October. The aim is to have enough by the end of 2019 so that 90% of all rail passengers in the Netherlands pass a water tap during their journey. NS is investing more than €3 million in installing the water taps and maintaining them over the next ten years. NS is taking this initiative in order to encourage people to drink tap water, thereby helping reduce waste in the form of plastic bottles.

Voting at stations

In 2018, passengers were able to vote in the municipal elections and advisory referendum at a record number of stations. Being able to set up polling stations at train stations is important for municipalities and for NS as part of its hospitality.

Clean stations

NS Stations is responsible for keeping all stations clean and free of snow, regardless of which carriers stop at the station. Passengers are positive about the cleanliness of stations: 80% gave a score of 7 out of 10 or higher in 2018, as opposed to 78% in the previous year. Research shows that visitors think that some aspects of the cleaning, such as floors, benches and rubbish bins, are more important than others. Paying extra attention to these aspects has improved the customer satisfaction score.

Stations undergoing renovations

Eindhoven station was officially reopened on 22 March. After extensive refurbishment work lasting five years, passengers can now enjoy the space and facilities appropriate for a modern-day, future-proof station. We built a spacious underpass next to the old tunnel with shops, escalators and lifts, artworks and plenty of space for waiting. This was done while retaining the iconic, listed station building, which was restored to its former glory.

In 2018, renovation work was carried out at 13 stations, including Harderwijk, Assen and Driebergen-Zeist. The renovations are progressing smoothly and some stations have already been finished. The new Amsterdam Zuid station is expanding from 1,750m² to 5,400m². It will become a clearly laid out station with a ground-level passageway open to all and extra wide underpasses giving access to the train and metro platforms, supervised bicycle storage facilities, ticket sales, shops and other station facilities. Covered pedestrian routes will be added to the station exterior with facilities for taxis, buses and trams. The facilities that are on offer will be comparable to Utrecht Centraal and Rotterdam Centraal stations. All the lessons we learned from recent major renovations such as those at Breda, Den Haag Centraal, Utrecht Centraal and Arnhem Centraal stations are incorporated in the design. For example, construction is taking place in phases so that it can still be 'business as usual' during the renovation.

Last year, the municipality of Almere, NS, ProRail and the provincial authority of Flevoland started preparations for improving Almere Centrum station and its immediate surroundings. Almere Centrum is the largest Intercity station on the Flevo Line, which gives it a key function in the public transport network for the city and the region.

Development of station areas

There are plans to turn the Cartesius triangle — the former workshop and shunting yard in Utrecht — into the healthiest and most public-transport and bicycle friendly neighbourhood in the Netherlands. The development of this area is based on the Course Document that NS and the municipality of Utrecht drew up jointly and that was adopted unanimously by the municipal council. The design builds on the shared aim of NS and the municipality of Utrecht to enable healthy lives in a healthy living environment. Around 2,600 homes will be built, along with a large park, a school, a supermarket, hospitality sector amenities and various other facilities. The historic CAB building will be the eye-catching centrepiece of the new neighbourhood, with space for music-making creatives and a brewery, among other things. Local residents and other stakeholders will have a role in shaping the developments.

An NS site is being redeveloped in Rotterdam too. This is De Boezembocht, which will provide

more room for the city district of Nieuw Kralingen. The site has been cleared. This process was notable for the online auction of a concrete mixing plant.

In 2018, NS Stations sold The Globe building and a development plot on Waldorpstraat next to Den Haag Hollands Spoor station. NS Stations bought The Globe in 2015 as part of the project working on Den Haag Hollands Spoor station. That work started in 2017. Last year, NS Stations decided to put The Globe back on the market because the property was not part of the strategic property portfolio that adds value to stations or their surroundings.

NS Stations invests the proceeds in stations and their surrounding areas. In doing this, we are responding to demands from passengers for more services and facilities (such as bicycle storage facilities, toilets and water taps). We are also building additional waiting areas for the staff of the various carriers.

Safety at the station

As in other years, the safety of visitors, our employees and office and shop staff at stations are an important focal point in 2018. We used safety rounds, safety targets, investigations of incidents and communication as ways of working on a safety culture in which we are open about safety risks and incidents. We share our knowledge about safety programmes with our lessees too. This lets us learn with and from each other and improve the processes.

Sustainability at stations

In 2018, trials were held at Utrecht Centraal and Zwolle stations for separating disposable paper cups from other waste. The change to the layout of the fast-food court at Utrecht Centraal offered an opportunity to install the new waste bins. At Zwolle station, some of the existing bins were adapted for collecting disposable cups by changing the openings and placing new stickers. The experiment fits in with NS's goal of reducing the amount of passenger waste by 25% by 2020 when compared with 2014. We want separate collection of 75% of that waste so that it can be used for recycling.

Travelling without barriers

Nobody's journey is entirely by train. They usually set out by bicycle, sometimes on foot, or by car or another form of public transport. The end station is also seldom the final destination. People can use a public transport bicycle, the bus or a shared car for the final stage. To keep rail travel attractive, we are investing in forms of transport that complement the train. This lets us ensure a pleasant journey to and from the station and help 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 storage facilities for around 143,000 bicycles, unsupervised facilities for more than 317,000 bicycles and 12,500 bicycle lockers at stations. ProRail and NS Stations are working with partners to develop bicycle storage facilities where rail passengers can store their bikes easily and conveniently. Our offering includes free storage for the first 24 hours (at 60 storage facilities), digital pointers to the free storage slots, the option of paying with public transport smartcards, and a uniform design. In 2018, NS Stations and ProRail reached agreements with various municipalities to offer these services in the bicycle storage facilities at the stations. We also opened new bicycle storage facilities in 2018 at the stations of Maastricht, Utrecht Centraal (the Knoop facility), Amsterdam Zuid (the Strawinsky facility) and Assen. We increased the capacity of the storage facility in Leeuwarden.

Self-service bicycle storage facilities

In 2018, 46 bicycle storage facilities at stations were converted in the space of a few months into the new self-service format. The storage facilities have a new entrance with transparent access gates. Cyclists can store their bicycles free of charge for the first 24 hours when using their public transport smartcard. Where necessary, bicycle racks have been added, lighting improved and repairs carried out. In Kampen, there was a lack of room at ground level so an old cellar was converted into a new self-service bicycle storage facility with room for 235 additional bicycles. The municipality and provincial authority helped finance this renovation of the cellar.

Fiets & Service

In 2018 we opened Fiets & Service ('bike & service') centres at Maastricht, Apeldoorn, Zutphen, Assen and Nijmegen stations. The Fiets & Service outlet at Breda on the city centre side has been closed but there is still a Fiets & Service outlet on the Belcrum side. Fiets & Service is a service format for bicycle repairs, parts and accessories. At the end of 2018, a total of 24 stations had a Fiets & Service centre.

OV-fiets

Passengers made 4.2 million trips by OV-fiets in 2018 (2017: 3.1 million). We recycled around 1,000 public transport bicycles in 2018 and increased the number of bicycles by 6,000 in order to meet growing customer demand. That brought the total number of public transport bicycles to 22,500 at the end of 2018.

On 1 January 2018, it was ten years since NS took over the OV-fiets service. To mark the occasion, we organised a congress in which we looked both back and towards the future of shared bicycles, the shift from ownership to usage and the developments associated with bicycle parking and OV-fiets with partners such as ProRail, the Ministry of Infrastructure and Water Management, municipalities and provinces, business contacts, former officials of various foundations, and colleagues past and present.

Car parking

6% of rail passengers go to the station by car and park there. In 2018, over 500 additional P+R spaces were created at five stations. The number of P+R spaces close to stations is now over 47,000 (2017: 44,000).

In the energy-neutral garage at Driebergen-Zeist station, passengers have been able to use shared electric vehicles since December 2018. That helps them make their door-to-door journeys as sustainable as possible.

NS Zonetaxi

NS Zonetaxi has been available at 244 additional stations since the end of 2018. Passengers can now make use of NS Zonetaxi at a total of 377 stations. The service is easy to arrange with online booking and payment in advance using iDEAL. You no longer have to register as an NS Zonetaxi member. The basic fare for the first two kilometres was increased for the first time since 2012. The rise was due to an increase in the VAT rate and rising costs. The fares for additional zones have remained the same.

Retail at the station

The guiding principle in NS's retail policy is that we let the market do what it now can do. The HEMA station shops were transferred to HEMA BV on 1 October. In spring 2018, we conducted a market consultation for the commercial operation of Broodzaak, Starbucks and Smullers. As a result of this, the Broodzaak sales outlets were transferred to HMSHost on 1 December 2018, Starbucks to the catering company SSP on 1 January 2019 and Smullers to Lagardère on 1 February 2019. All 1,300 employees were informed and will have comparable terms of employment after the businesses change hands.

In line with its strategy, NS Stations will continue to operate the following formats: Kiosk (including vending machines), StationsHuiskamer, Railcatering, AH *to go* and Julia's.

Improvements to formats

Last year, we started on further improvements of the Julia's, Railcatering and Kiosk formats, the vending machines and StationsHuiskamer. These formats will remain part of NS Stations.

Operations abroad

Abellio



Abellio is a fully-owned subsidiary of NS Groep N.V. (NS) and operates in the passenger transport markets in the United Kingdom and Germany. Every day, Abellio people work to deliver safe, accessible and reliable public transport. Abellio aims to build strong relationships with its customers, stakeholders and employees.

Kengetallen

| | Abellio UK (excl. Merseyrail) | Abellio Germany |
|----------------------|----------------------------------|-----------------|
| Number of employees | 13,427 | 2,085 |
| Revenue (€ millions) | 2,467 | 357 |

In 2018, Abellio achieved a revenue of € 2.82 billion, of which € 2.47 billion for Abellio UK, and € 357 million for Abellio Germany. With the addition of West Midlands in UK and the increase in shares from 25% to 100% of WestfalenBahn in Germany in December 2017 the revenue has increased in 2018 by € 706 million. With the start of Dieselnetz Sachsen Anhalt and Rhein Ruhr Express in Germany on 9th December 2018 and growth in the existing franchises, Abellio expects the revenue will further rise in 2019. The value of the British pound continued to decrease in 2018 from an average rate of 1.14 to 1.13. As in 2017 the revenue figure is influenced by this exchange rate. Based on the 2017 exchange rate for the British pound, Abellio's revenue in 2018 would have been € 24 million higher.

Currently Abellio is awaiting the decision on 2 UK bids that have been submitted in 2018 for the franchises South Eastern (in partnership with Mitsui and East Japan Railway Company) and East Midlands.

Strategy



Abellio's strategy helps NS to achieve its objectives and has 3 pillars: earn, learn and prepare, whilst effectively balancing risk and reward of its foreign activities by means of a portfolio approach. Ultimately the Dutch passengers will benefit from Abellio's activities abroad because of the experience gained in these markets and the return on investment that NS wants to achieve.

Prepare

In the early 2000s, NS decided to enter the deregulated railway market to prepare for the liberalisation of European markets, in line with legislation such as the EU's Fourth Railway Package. Since then, Abellio has built up a strong position in the United Kingdom and the regional railway market in Germany. At the same time other European rail companies, such as DB and SNCF, are active in the Dutch public transport market. With its clear focus on the key rail markets in Northwest Europe, NS is developing a strong position in the European market through Abellio and seeks to find opportunities that will also contribute to the public transport and passengers in the Netherlands, for example cross border connections.

Learn

NS is learning from Abellio's experience operating in highly competitive and commercial environments. At the same time, Abellio incorporates best practices from the Netherlands in its bids and when running its operations. This means that both NS and Abellio learn from the experience of bidding for tenders, as well as through operating franchises.

Earn

Abellio's strategic priority is to achieve positive, sustainable financial results through effectively managing risks and keeping investments of NS at an acceptable level. The ultimate objective is to create a diversified portfolio of long-term sources of income, and to realise solid levels of profitability.

Growth strategy

All of Abellio's franchises in the United Kingdom and Germany are expected to be profitable over their contract periods. This is a result of our targeted approach to achieving growth, and effective balancing of risk and reward based on a portfolio of contracts. In the United Kingdom, 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 subsidy received is based on the gross costs of the contract.

Capital at risk

In 2018 Abellio worked within the capital at risk framework which was agreed in 2016 with the Dutch Ministry of Finance and NS. With this framework NS and Abellio can develop foreign activities whilst balancing acceptable risks and results. The framework stipulates how much capital at risk can be invested in the United Kingdom and Germany. Foreign franchises and concessions, like Dutch activities, involve (financial) risks. The Dutch State as shareholder, represented by the Ministry of Finance, has agreed with NS rules to limit the financial exposure in foreign activities. The core of the agreement is that an upper limit has been set for the capital at risk that NS, as the parent company of Abellio, may allocate for its foreign activities of Abellio. This consists of € 500 million for invested capital and regular guarantees. The total amount of invested capital and regular guarantees is € 451 million as at 31st December 2018. 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 subordinated shareholder loans to support investments in the franchise and maintain required liquidity ratios. No capital contributions or equity investments are required at the start of a franchise. The total amount of parent company guarantees is € 326 million as at 31st December 2018 of which an amount of € 64 million has been drawn.

Abellio United Kingdom (UK)



Description of the UK rail and bus market

The UK government privatised the railways in 1993; since this time the UK franchising bodies award contracts for the operations of UK rail franchises to private operators (Train Operating Companies, TOCs) for a specified period of time. As at December 2018, there are 23 TOCs running franchises, 4 of which are managed by the Abellio group. 13 of these franchises are let by the Department for Transport (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 together with Network Rail on a day to day basis 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 and costs of public transport in Scotland and will improve services for the passengers.

Current market context

Calls for radical change of the UK rail industry, including increasing support for renationalisation, are driven by growing frustration at poor performance and (perceived) high fares and fare increases. The annual fare increases are perceived as high, however these mainly reflect the political decision taken years ago to shift the balance of network costs onto passengers rather than general taxpayers. A significant proportion of punctuality issues are down to the already publicly owned UK infrastructure operator. Public dissatisfaction reached a tipping point in 2018, with the introduction of time table changes at Northern, Govia Thameslink Railway and ScotRail, fueling calls for radical change. On top of that it became clear that the growth in passenger numbers and related revenue that has come since privatisation also declined for many franchises in 2018 as a result of changing working patterns, with more people working from home, for example. This increased the pressure on the financial system. In response, the UK Government commissioned a 'root and branch' review of the UK rail industry, chaired by an independent business leader. In calling the 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 Network Rail and the impact of industrial relations issues.

This review is expected to run until late 2019, when recommendations will be made that will lead to legislation to reform the system over the long term. While the Government has suggested that changes heralded by the review will be implemented prior to the expected 2022 general election, there is no indication that existing franchises will be prematurely terminated. Against this backdrop Abellio UK remains focused on the core task of delivery across its operations. Despite the fact that Abellio UK was faced with difficult circumstances in 2018, resulting in a poorer punctuality than would otherwise be expected and weaker financial returns at Greater Anglia and ScotRail. Abellio UK has shown relatively steady performance results over time and will keep unremitting focus to deliver the anticipated enhancements. This means that Abellio UK is well positioned to participate in the future shape of the UK rail industry. To this end Abellio UK is engaging with the Government's review, providing evidence and insight that helps the review team to fully appreciate what is needed to operate a successful railway and the systemic issues that need to be addressed.

Brexit

On 23 June 2016 the British people voted to leave the European Union (EU) (Brexit). In March 2017 the UK submitted the official notification of its intention to withdraw from the EU under Article 50. This started a 2-year negotiation period on the terms of leaving the EU. If no agreement is reached before 29 March 2019 ('no-deal Brexit' or 'hard Brexit'), all EU primary and secondary law will cease to apply to the UK. The UK will become a 'third party' country, putting the country's trading relationship with the EU on World Trading Organisation terms. Abellio UK is active only in the UK and does not provide any international cross-border passenger rail services. All necessary licences 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 licences etc.

The British Pound (GBP) has fallen in value against the Euro since the Brexit vote from 1.31 (24-6-2016) down to 1.11 at year-end 2018, a decline of 15%. 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 in a decline in economic growth having an impact on passenger revenue and profitability. In the event of a 'no-deal' Brexit 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 will hamper the growth in revenue and will have an impact on results of Abellio UK.

Regional bus market

The regional UK bus market is deregulated. The majority of regional bus services are operated by 'the Big Five' (Arriva, FirstGroup, Go-Ahead Group, National Express, and Stagecoach Group). Abellio operates bus services in London. In London, bus routes are let by the local transport provider – Transport for London (TfL) – for a period of 5 years based on tenders.

Abellio UK rail and bus franchises

Abellio operates 4 UK rail franchises and around 8% of London bus services with a combined revenue of € 2.67 billion (including Merseyrail). The company operates ScotRail, Greater Anglia as a 60:40 venture with Mitsui, West Midlands as a 70:15:15 venture with Mitsui and JR East, Merseyrail as a joint venture with Serco, as well as a profitable bus business. At the time of publishing this report, Abellio is in the running for the South Eastern and East Midlands tender awards following bid submissions in 2018. The bus business provides complementary travel expertise, including a successful rail replacement service in case of disruption for Abellio TOCs and one competitor.

Key figures per UK rail franchise and bus company

| TOC | Revenue in € millions | Customer satisfaction | Punctuality | Number of SPADs | CO ₂ emissions | LTIFR | Number of stations | Number of train sets/ buses | Number of employees |
|---|-----------------------------|--------------------------|-------------|--------------------|------------------------------|-------|--------------------------|--------------------------------------|------------------------|
| Greater Anglia | 777.5 | 74.5% | 87.1 | 13 | 106 | 2 | 136 | 1,064 | 3,157 |
| Merseyrail* | 183.0 | 91% | 95.4 | 5 | 37 | 3 | 66 | 177 | 1,181 |
| ScotRail | 889.2 | 81.5% | 87.3 | 20 | 173 | 4 | 358 | 1,088 | 4,989 |
| West Midlands | 611.3 | 82.5% | 85.9 | 10 | 97 | 4 | 152 | 573 | 2,764 |
| Abellio London Bus | 219.3 | - | - | - | 45 | 2 | - | 732 | 2,314 |
| Total for TOCs | 2,680.3 | - | - | 48 | 458 | - | 712 | 3,634 | 14,405 |
| Consolidated (incl. head office, excl. JVs*) | 2,467.0 | | | | | | | | 13,427 |

* Income and number of Merseyrail employees at 100% (Merseyrail is a joint venture [JV] of 50% and is therefore not consolidated in the annual report)

2018 Overview

In 2017 Abellio UK reached the largest and most diversified position in its operating history, with the start of the West Midlands franchise in December. In 2018 Abellio was the third largest rail owning group in the UK with around 14% market share by revenue and achieved a consolidated revenue of € 2.47 billion. Abellio's 4 TOCs each have several years remaining on their contracts. The first potential franchise end could be ScotRail in 2022, should the break clause be exercised (a decision will be made in the second half of 2019). If the ScotRail break clause is not exercised, the first time that Abellio will experience a major contract expiry will not be until 2025 when both the ScotRail and Greater Anglia contracts reach their full terms.

Abellio UK consolidated (excl. Merseyrail)

| | 2018 | 2017** |
|-------------------------------|---------|---------|
| € million | | |
| Income | 2,467.0 | 1,742.9 |
| EBIT before CLE | 81.7 | 48.3 |
| CLE* | -40.7 | -2.9 |
| EBIT after CLE | 41.0 | 45.4 |
| Intercompany financial result | -12.3 | -6.5 |
| Net profit | 26.2 | 29.3 |
| CapEx | 45.5 | 70.2 |

* of the total CLE impact 2018 € 19 million relates to prior years.

** Comparative figures have been adjusted for change in accounting principle regarding railway pension schemes.

Operational performance

Operational performance remains a priority for the TOCs, with strong partnership with Network Rail across all Abellio 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 Abellio rail franchises are all above the average of all UK TOCs. The following table shows the PPM for 2018 and 2017 and number of trains running per day per UK franchise:

| Train operator | PPM MAA 2018 | PPM MAA 2017 | Trains per day |
|--------------------------------------|--------------|--------------|----------------|
| 1 Merseyrail | 95.4% | 95.3% | 608 |
| 2 c2c | 93.8% | 95.9% | 385 |
| 3 LOROL | 93.7% | 94.6% | 1,444 |
| 4 Chiltern | 92.7% | 92.9% | 426 |
| 5 TfL Rail | 92.4% | 94.1% | 420 |
| 6 Transport for Wales | 91.2% | 89.5% | 964 |
| 7 Heathrow Express | 90.5% | 90.3% | 152 |
| 8 East Midland Trains | 89.1% | 92.7% | 476 |
| 9 Caledonian Sleeper | 88.9% | 87.3% | 8 |
| 10 South Eastern | 88.0% | 88.7% | 1,951 |
| 11 ScotRail | 87.3% | 90.4% | 2,365 |
| 12 Greater Anglia | 87.1% | 89.4% | 1,244 |
| 13 West Midland Trains | 85.9% | 88.3% | 1,321 |
| Average ALL TOCs | 85.7% | 88.4% | |
| 14 CrossCountry | 83.6% | 88.8% | 295 |
| 15 Great Western | 83.2% | 87.0% | 1,563 |
| 16 Virgin West Coast | 83.0% | 86.0% | 303 |
| 17 GTR | 81.7% | 90.8% | 3,492 |
| 18 South Western | 81.6% | 85.8% | 1,641 |
| 19 Northern | 80.7% | 89.2% | 2,815 |
| 20 Grand Central | 76.8% | 85.8% | 18 |
| 21 TPE | 75.4% | 87.7% | 319 |
| 22 LNER (formerly Virgin East Coast) | 73.1% | 84.5% | 148 |
| 23 Hull Trains | 68.7% | 79.8% | 15 |

1 This table shows the performance of the UK's train operating companies (MAA = Moving Annual Average) for period 10 of the railway calendar for 2018 and 2017. 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. Hull Trains, Heathrow Express, Grand Central are 'open access' operators while Merseyrail, LOROL and TfL Rail are public sector operated concessions. LNER is operated directly by DfT.

The decline in PPM over recent years and in 2018 in particular was caused by a range of factors, although the majority of delays are down to Network Rail infrastructure projects and extreme weather.

| | Greater Anglia | Merseyrail | West Midland Trains | ScotRail |
|-------------|----------------|------------|---------------------|----------|
| NR on TOC | 65.1% | 56.1% | 57.7% | 57.8% |
| TOC on self | 25.6% | 42.2% | 26.2% | 32.4% |
| TOC on TOC | 9.3% | 1.7% | 16.1% | 9.8% |

This table shows the causes of delays to Abellio TOCs in 2018 as attributed to the following categories:

- NR on TOC: delays attributed to Network Rail on train operating companies, including extreme weather conditions.
- TOC on Self: delays attributed to train operating companies by the same train operating company.
- TOC on TOC: delays attributed to train operating companies by other train operating companies.

Customer Satisfaction

Customer satisfaction with rail services is captured in the UK through the National Rail Passenger Survey (NRPS) of around 25,000 rail users, carried out by Transport Focus in Spring and Autumn each year. In line with the industry-wide operational issues and the negative media reporting of the rail industry, overall NRPS scores declined in 2018.

The full 2017 and 2018 overall satisfaction NRPS scores for Abellio TOCS were as follows:

| | Spring 2017 | Autumn 2017 | Spring 2018 | Autumn 2018 | Actual 2018 | Target 2018 |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Merseyrail | 94% | 89% | 92% | 90% | 91% | 90% |
| WMT | 84% | 84% | 81% | 84% | 82.5% | 84% |
| ScotRail | 90% | 85% | 84% | 79% | 81.5% | 89% |
| GA | 83% | 81% | 76% | 73% | 74.5% | 82% |
| Average for all British TOCs | 83% | 81% | 81% | 79% | 80% | n/a |

Abellio UK as employer

Abellio UK is a major employer in the UK, employing over 14,000 people in 2018, including Merseyrail. Over the past years, 3 of Abellio's TOCs (Greater Anglia, ScotRail and Merseyrail) have experienced industrial action mostly associated with proposed introduction of Driver Controlled Operations.

Outlook for 2019

Abellio UK's bidding strategy is based on a considered approach whereby bids are only made for franchises that are lower risk and which complement the existing portfolio. The preferred focus is regional railways and London-commuter railways.

In line with this approach, current growth plans are to add an additional rail franchise to the portfolio. To this end, in 2018 bids were submitted for the South Eastern franchise as part of a 60:40 venture with Mitsui and East Japan Railway, and for East Midlands. Abellio is awaiting the award decision for both of these franchises. If successful for either, there is expected to be a mobilisation period in early 2019 with start of operations in Q3/Q4 2019.

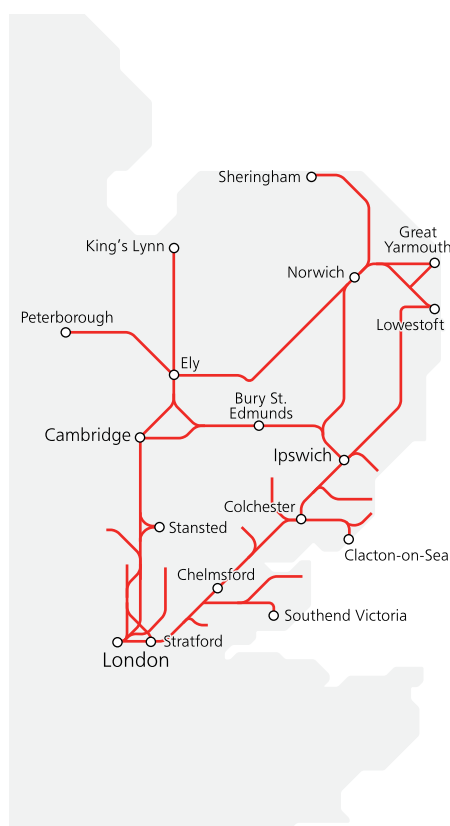
Abellio UK will also focus on further enhancing operational performance and revenue growth across the existing portfolio. 2019 will be a transformative year, with major time table changes and new rolling stock and associated service enhancements being introduced in a number of Abellio franchises, towards all having new fleets introduced by 2022. Making a success of this challenging undertaking will be a priority throughout the year. The introduction of new trains in 2019 and subsequent years is a key component of an investment program of over € 3.5 billion for new trains, depots and station enhancements.

Greater Anglia

The Greater Anglia (GA) 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. 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. GA is undertaking a transformation in the next couple of years underpinned by a complete fleet replacement with new trains that will significantly increase capacity on the network. The first of the new trains will come into service in 2019 and all will be in service by the end of 2020. The timely delivery of new trains and infrastructure projects will take a lot of effort for the organisation in the next years.

CLE

The franchise faces the implications of the DfT's imposition of the Central London Employment (CLE) mechanism. Intended to provide protection against the risk of external economic factors having an impact on passenger revenues, CLE is predicated on an assumed correlation between growth in central London employment levels and passenger growth with corresponding revenue growth. However, it is now clear that this correlation does not exist, due to changes in working travel patterns and growth in home working. As a result Greater Anglia, like other franchises in the London area, is facing a potentially further payment to the DfT for supposedly growth in CLE, without a corresponding rise in passenger numbers and revenues. The first payment to the DfT of € 41 million has been charged in 2018 for the period 2016-2018 and put the franchise into an in-year loss-making position in 2018. Shareholder loans (PCS) of € 89 million in total have been drawn in 2018 to finance the CLE payments and capital expenditures at an interest rate of 8%. These loans are repayable before the end of the franchise. Work is ongoing to resolve the CLE issue.



| Greater Anglia | 2018 | 2017** |
|-------------------------------|-------|--------|
| € million | | |
| Revenue | 777.5 | 736.7 |
| Operating result before CLE | 39.0 | 38.1 |
| CLE* | -40.7 | -2.9 |
| Operating result after CLE | -1.7 | 35.2 |
| Intercompany financial result | -5.1 | -0.9 |
| Profit after taxation | -5.1 | 29.9 |
| Investments | 26.4 | 34.8 |

* of the total CLE impact 2018 € 19 million relates to prior years.

** Comparative figures have been adjusted for change in accounting principle regarding railway pension schemes.

Merseyrail

Merseyrail (MR) is Abellio's longest franchise. Let by Merseytravel (MT, regional transport provider), MR operates metropolitan services in and around the Liverpool region for a period of 25 years from 2003. Abellio operates MR as part of a 50/50 joint venture with Serco. Now in the second half of the franchise, MR is focusing on delivering 4 transformational 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
4. revenue growth

The new fleet has been procured publicly by MT and will be delivered by Stadler, coming into operation from 2020. MR continues to be among the top UK operators for passenger satisfaction and operational performance, and was awarded the Passenger Operator of the Year at the 2018 National Rail Awards.



| Merseyrail | 2018 | 2017* |
|----------------------------------|-------------|--------------|
| € million | | |
| Revenue | 183.0 | 174.0 |
| Result from operating activities | 25.2 | 25.2 |
| Profit after taxation | 20.4 | 20.7 |
| Investments | 1.6 | 1.0 |

* Comparative figures have been adjusted for change in accounting principle regarding railway pension schemes.

ScotRail

ScotRail is let by Transport Scotland 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 which will end in 2025 unless Transport Scotland elect to exercise a break clause to end the contract in 2022.

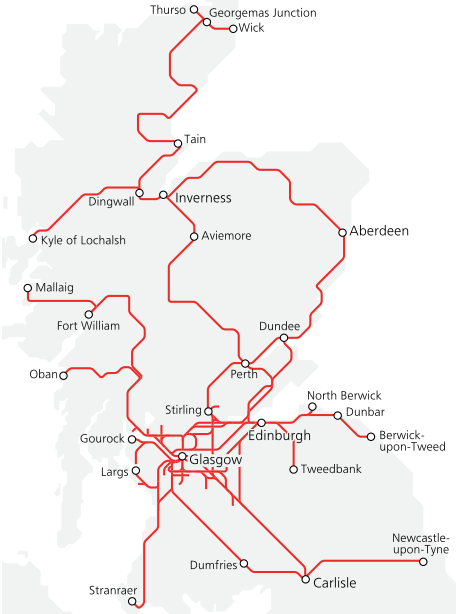
ScotRail is operated under the Alliance Agreement with the infrastructure provider – Network Rail – with the aim to maintain the infrastructure and deliver train services for the passengers in an optimal way. The Alliance has been able to achieve its main objectives to only a limited extent.

The initial results of major changes in infrastructure, renewal and extension of train fleet that allow major upgrades to rolling stock delivering passenger capacity and increased comfort in Scotland were visible in 2018. ScotRail is making a once in a generation investment in 70 modern electric Hitachi class 385 trains that are faster, longer, and greener. During 2019 ScotRail will bring refurbished High Speed Trains into service to improve connectivity between Scotland's 7 cities. The first Hitachi 385s began operating in July 2018 and the first of 26 High Speed Trains, refurbished by Wabtec, entered into service in October 2018.

Following the December 2018 timetable changes in Scotland – the biggest changes since the

1990s – there was extensive media coverage of cancellations and delays in the first weeks. 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 because this had to be achieved in a very short period of time mainly due to the aforementioned delays. Due to the dedication of the ScotRail employees these performance issues have been remedied in the meantime.

Over the next 18 months all major service changes to the timetable and the new and refurbished fleet will be in place leaving only the Queen St Station rebuild in Glasgow to complete in 2020. Queen St Station is the Glasgow terminal station of the busy Edinburgh-Glasgow line. The associated journey flows account for circa 30% of ScotRail’s annual revenues. In 2016 the station was closed for a period of 20 weeks reducing passenger numbers, which also still has an adverse impact on passenger growth compared to the remainder of the network. This had a negative impact on the total realised revenue of ScotRail.



| ScotRail | 2018 | 2017* |
|----------------------------------|-------|-------|
| € million | | |
| Revenue | 889.2 | 769.1 |
| Result from operating activities | 1.4 | 1.1 |
| Intercompany financial result | -2.5 | -2.1 |
| Profit after taxation | -2.3 | -4.0 |
| Investments | 10.9 | 11.2 |

* Comparative figures have been adjusted for change in accounting principle regarding railway pension schemes.

West Midlands

Abellio began operating West Midlands Trains (WM) 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 DfT, however the regional client is Transport for West Midlands, and covers services across Birmingham, as well as trains from London Euston to Crewe and from Liverpool to Birmingham.

WM is focused on delivering public transport improvements in the region, bringing in over 400 train vehicles by 2021 which will provide space for an extra 85,000 passengers on rush hour services in Birmingham and London. The first major timetable change is scheduled for May 2019, which will take a lot of effort for the organisation.

The first full year result of this franchise has been positive. WM is also impacted by DfT’s imposition of the CLE mechanism, but the impact in 2018 was not as severe as for the Greater Anglia franchise.





| West Midlands | 2018 | 2017 |
|----------------------------------|-------------|-------------|
| € million | | |
| Revenue | 611.3 | 37.2 |
| Result from operating activities | 43.6 | 3.6 |
| Profit after taxation | 34.0 | 2.7 |
| Investments | 7.1 | 19.0 |

* Comparative figures have been adjusted for change in accounting principle regarding railway pension schemes.

Abellio UK Bus

Abellio London Bus (UK Bus) was acquired in 2009, since when Abellio has grown the business by 30%.

UK Bus employs around 2,000 staff and runs over 700 buses over 47 London routes as at December 2018. This represents around 8% market share and is expected to grow as more services are won from a new depot in Southall, West London.

Abellio also operates 2 complementary bus services via Abellio Rail Replacement (ARR) and Event Connect. ARR provides bus services to the Greater Anglia, ScotRail and West Midlands franchises and to Serco's Caledonian Sleeper franchise. Event Connect provides bus services to events, such as major sporting events or corporate activities.

| Abellio London Bus | 2018 | 2017 |
|----------------------------------|-------------|-------------|
| € million | | |
| Revenue | 219.3 | 216.7 |
| Result from operating activities | 7.7 | 8.0 |
| Profit after taxation | 6.9 | 6.2 |
| Investments | 1.0 | 4.4 |

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 €10.5 billion per year and a network covering roughly 670 million train-kilometers per year and has been deregulated since 2003, with responsibility for its organisation 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. There is a constant flow of tenders into the market, and this will continue well into 2019 and 2020. Next year the networks S-Bahn Berlin and amongst others some smaller networks like Raum Karlsruhe 7b, Expresskreuz Niedersachsen/Bremen and Heidekreuz/Weser-Lammetal will come to the market. A start of the RE13 tender process (including cross-border extension from Eindhoven to Düsseldorf) in 2019 is legally possible, since VRR has announced in August 2018 the intention to tender this line with a contract start in December 2025. The tender process may start in August 2019 earliest and Abellio Germany expects a prequalification stage will be the initial stage of the tender.

There were two particular challenges in the German rail market in the past year relating to major railway construction works and new staff tariff agreements.

The Round Table Management of Construction Sites was founded largely on the initiative of Abellio and the Mofair Association. The aim was to develop measures for more traffic, better quality and reliability in order to reduce the impact on passengers during the construction phase as much as possible during the urgently needed modernisation of the German rail network. The final report with measures for improvement was publicly handed over to the Federal Minister for Transport and Digital Infrastructure in June 2018.

In addition, reduction of working hours and scheduling flexibility in new tariff agreements resulted in a need for more employees (mainly train drivers and conductors). Due to low unemployment rates in Germany it is difficult to find sufficient additional employees.

Abellio Germany has finalised mobilisation and started operation of 2 new concessions in December 2018, being the Rhein-Ruhr-Express (RRX) in North Rhine-Westphalia and the Dieselnetz Sachsen-Anhalt (DISA) in Mitteldeutschland. Whereby the start of the RRX contract has been successful, Abellio faces some challenges regarding the DISA concession due to a lack of sufficient train drivers. Measures have already been initiated to stabilise operations.

In Germany, Abellio only has gross contracts with the PTAs, which means that Abellio Germany is paid for its service per train kilometer. The revenue/fare box risk is allocated to the PTA. On top, inflation risk is hedged by appropriate escalation formulas in the contracts with the PTAs. Thus, the risk profile of gross contracts is relatively low.

Abellio Germany rail concessions

In Germany, Abellio continues to operate in 3 regions, together operating 8 concessions. In North Rhine-Westphalia (NRW) it operates with Abellio Rail Nordrhein-Westfalen GmbH 5 rail concessions, being Emscher Ruhrtal-Netz, 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). Abellio also continues mobilising the S-Bahn Rhein-Ruhr and Ruhr-Sieg-Netz 2 concession in NRW as well as in southern Germany (Abellio Rail Baden-Württemberg GmbH) lot 1 of the Stuttgarter Netz (STN) in order to start operating these concessions in 2019. The concessions that are currently being operated are.

| Concessie | Company | Start | End | Passengers per day (approx.) | Punctuality 5 min. | Train sets |
|--|---------|-----------|------|------------------------------|--------------------|------------|
| Emscher Ruhrtal-Netz (ERN) | ABRN | 2005 | 2019 | 2,000 | 98.1 | 3 |
| Ruhr-Sieg-Netz (RSN) | ABRN | 2007 | 2019 | 22,000 | 92.3 | 17 |
| Der Müngstener (S7) | ABRN | 2013 | 2028 | 13,000 | 95.5 | 9 |
| Niederrhein-Netz (NRN) | ABRN | 2016 | 2028 | 19,000 | 92.6 | 21 |
| Rhein-Ruhr Express (RRX) | ABRN | 2018-2020 | 2033 | 40,000 | nvt | 29 |
| Emsland- und Mittelland-Netz (EMIL) | WfB | 2015 | 2030 | 35,000 | 92.4 | 28 |
| Saale-Thüringen-Südharz Netz (STS) | ABRN | 2015 | 2030 | 23,000 | 93.7 | 35 |
| Dieselnetz Sachsen-Anhalt (DISA) | ABRN | 2018 | 2032 | 17,000 | 80.8 | 54 |

The concessions in the mobilisation phase are:

| Franchise | Company | Start | End | Passengers per day (approx.) | Train sets |
|----------------------------------|---------|-----------|------|------------------------------|------------|
| S-Bahn Rhein-Ruhr | ABRN | 2019 | 2034 | 80000 | 29 |
| Ruhr-Sieg-Netz 2 (RSN II) | ABRN | 2019 | 2034 | 17000 | 18 |
| Stuttgarter Netz (STN) | ABRN | 2019 2020 | 2032 | 25000 | 52 |

2018 overview

In 2018 Abellio Germany achieved a revenue of € 357 million from its current operations which will grow to circa € 800 million in 2021. The EBIT of € -1.4 million was in line with the budget. While contracts in operation generated a positive result of € 6.7 million (2017 € 7.1 million), several projects have been mobilised during the year with a negative financial impact of € 7.0 million (2017 € 1.0 million). Mobilisation costs are partly capitalised and partly expensed as incurred whilst revenues will not be generated until the actual start of the operation. The next major contract expiry will not come until December 2028. Currently Abellio Germany runs 182 train vehicles serving approximately 171,000 passengers a day and employing 2,085 people. Including the mobilised concessions DISA and RRX at the end of 2018, Abellio Germany becomes the third largest train operating company in Germany, with annual train-kilometers of 38.7m in 2019. In recent years, Abellio has built up a strong competitive position in the German rail market.

| Abellio Germany consolidated | 2018 | 2017 |
|----------------------------------|-------|-------|
| € million | | |
| Revenue | 356.8 | 245.7 |
| Result from operating activities | -1.4 | 5.2 |
| Intercompany financial result | -5.3 | -3.2 |
| Profit after taxation | -5.7 | 6.7 |
| Shareholder's equity | 53.5 | 59.2 |
| Investments | 22.1 | 8.9 |

Abellio aims for controlled growth. This means Abellio opts for selective and responsible participation in tenders, professional mobilisation and commercial operation. At the end of 2017 Abellio became the sole shareholder of WestfalenBahn GmbH. In December 2018 Abellio in Mitteldeutschland started operating the Dieselnetz-Sachsen-Anhalt (DISA) concession and Abellio in North Rhine-Westphalia started operating the first phase of the Rhein-Ruhr-Express (RRX). The second phase will start in 2020. In Mitteldeutschland, the STS concession went in December 2018 into its fourth year of operations. Despite many infrastructure works of DB Netz, the overall performance of Abellio Rail Mitteldeutschland and punctuality was satisfactory.

The Regional Transport Association of Westfalen-Lippe (NWL) awarded Abellio Rail NRW again the gold medal for quality leadership this year. For the fourth year in a row, Abellio Rail NRW was the frontrunner in the category punctuality and excellently positioned at service performance and vehicle condition. WestfalenBahn came in third. In the quality report of the PTA VRR in North Rhine-Westphalia Abellio occupies 7 of the top 10 places in direct comparison of all lines.

Outlook for 2019

The market is expected to remain stable. Abellio will continue to bid selectively and responsibly. In 2019 Abellio will start operations in Stuttgarter Netz (STN), S-Bahn Rhein-Ruhr (SBRR) and Ruhr-Sieg-Netz 2 (RSN2) and will continue to focus on cross border connections like Arnhem-Düsseldorf.

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). Both agreements stipulate a 39 hour work week instead 40 hour work week (starting 1 January 2018). GDL will later go down to 38 hours. Negotiations for the renewal of the GDL contract for the years 2019 and 2020 have been concluded at the end of 2018. As a result of the new agreements Abellio will need to recruit additional staff and salary costs will increase.

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 carriages and 26 electric multiple units with 5 carriages. The first train sets will be delivered in the beginning of 2019.

For the DISA network Abellio has received all 54 Coradia Lint 1 in 2018 from Alstom. As the train sets for lot 1 of the RRX concession (29 Siemens Desiro HC in total, thereof 15 trains in the first operating phase starting December 2018) are operated by Abellio but provided, owned and maintained by the PTA and the manufacturer, these trains are not categorised as new trains for Abellio Germany (the same goes for the SBRR fleet).

Workshop under construction

A three-track servicing hall with a total length of 120 meters and train storage sidings for Stuttgarter Netz will be built in Pforzheim. This city in Baden-Württemberg near Stuttgart has a long standing train tradition and is ideally located within the route network. In October the groundbreaking ceremony with the State Transport Minister of Baden-Württemberg took place. It is foreseen that the train storage sidings will be finished in time for operation in June 2019. A partial commissioning of the workshop is planned for June 2019. The construction works for the new site will be finished in September 2019.

Abellio Rail NRW GmbH (ABRN)

On December 9th 2018, RRX was successfully set into operation. ABRN has started the operation with the line RE 11, which leads from Düsseldorf in North Rhine-Westphalia to Kassel in Hesse. RRX is the largest public transport project in NRW for decades and will be completed by the expansion of the existing railway infrastructure for then faster RRX lines until probably 2035. ABRN starts the second operation of line RE 1 in June 2020, which connects the cities in North Rhine-Westphalia from Dortmund to Aachen.



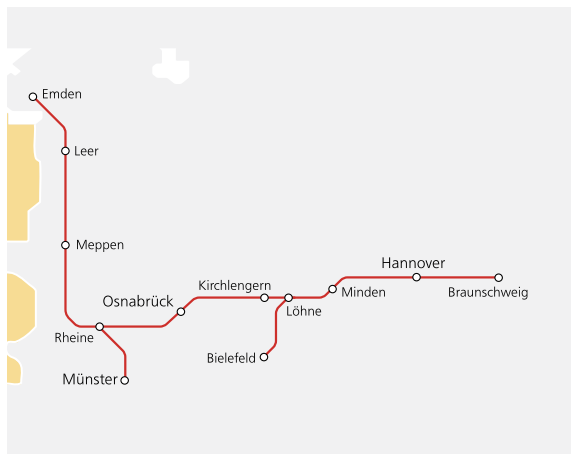
Abellio Rail Mitteldeutschland GmbH

Abellio expanded its presence in central Germany. Since 2015 Abellio trains are running in the Saale- Thüringen-Südharz (STS) electric network and from 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. To date, the STS electric network and the DISA network are among the largest networks to have ever been awarded to a regional rail transportation company in Germany.



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.



Looking ahead



Our goal for 2019 is to deliver the best possible performance, keeping in mind the midterm review, by continuing to make passengers, passengers and passengers our top priorities.

New strategy

In 2018, we fleshed out our new vision for the future and mission with a view to making sure the Netherlands remains accessible. Based on the new mission and vision, we are working out the strategy for the Netherlands for 2020 onwards. In 2018, we worked on the strategic course for NS in the Netherlands. The strategic choices will be worked out in detail in mid-2019, after which we will transition from the previous strategy, *Spoorslags Beter*, to the new one in 2020.

Franchise

In 2019, we want to maintain current performance levels and improve them where possible. That is the best way to make sure that people will continue to choose the train. HSL South will continue to require attention in 2019. Together with ProRail, we are working on making improvements within the scope of possibilities offered by the system and the trains. We also continue to invest, as ever, in improvements for passengers. For example, we are working on a nationwide roll-out of the seat searcher feature in the NS app. So far, this feature shows the location of empty seats in the train on certain routes. We are also coming up against the limits of infrastructure capacity because of increasing passenger numbers, and the limited availability of combining and handling capacity may eventually be a restricting factor. We are collaborating with ProRail on measures to tackle this problem where possible. Another improvement planned

for 2019 is that we want to offer rail passengers alternative travel options in the event of a disruption.

Passenger numbers on the HSL South are expected to grow further in 2019. In 2019, we will be adding almost 20% to the capacity by introducing one extra train an hour as of December 2018 and one extra carriage in every Intercity direct train as of the start of 2019.

International

Eurostar and NS are holding talks with the relevant authorities to reach agreement on the legal framework for passport controls in the Netherlands. Eurostar has also announced that a third train per day will run between Amsterdam and London as of June 2019. In 2018, NS put a fast connection between Amsterdam and Berlin on the agenda. In 2019, we aim to investigate this plan further with Deutsche Bahn and governmental bodies.

New trains

The first of the 206 new Sprinter trains from the Spanish train manufacturer CAF started operating in December 2018. The New Generation Intercity trains will start coming into operation in 2021. The first trains will be leaving the factory in 2019, and the process of testing, authorisation for use and training will start. NS will be upgrading a total of 80 double-decker train sets with 415 carriages in the period to 2020. The first modernised trains from this series will start running in 2021. The expectation is that all 131 Sprinter trains of type SLT will also have been upgraded by the end of 2021.

Improvements in the timetable for 2020

NS has made a number of suggestions for improvements in the 2020 timetable that have been submitted to passenger organisations and regional authorities. NS wants to cut journey times and improve changeovers in key areas. We also want to increase the number of trains per hour where possible. This would, for example, reduce journey times for Sprinter passengers in the northern Netherlands and increase the number of Intercity trains between Amersfoort and Utrecht from four an hour to six. There will also be additional Sprinter trains between Harderwijk and Amersfoort. In the summer, NS wants to run six trains an hour to the resort town of Zandvoort aan Zee rather than four. A comparison with the 2019 timetable shows that these proposals would cut journey times for 51,000 passengers and increase journey times for 5,500 passengers. Around 95% of passengers would see almost no change in their train journey. The 2020 timetable comes into effect on Sunday, 15 December 2019.

Stations

Sixteen stations are currently undergoing renovation work, including Amsterdam Zuid. Last year, Almere, NS, ProRail and the provincial authority of Flevoland started preparations for the improvement of Almere Centrum station and its immediate surroundings. In Utrecht, NS and partners are redeveloping the Cartesius triangle: around 2,600 homes are due to be built here starting in 2020, in what is designed to be the healthiest and friendliest neighbourhood for public transport and bicycles in the Netherlands.

In the period to 2020, we will be converting around 30 Kiosk outlets into StationsHuiskamer outlets, mainly at smaller stations throughout the Netherlands. We will also be installing water taps at 222 stations. The aim is to have enough by the end of 2019 that 90% of all rail passengers in the Netherlands pass a water tap during their journey.

Foreign operations

In 2018, Abellio UK submitted bids for the Southeastern franchise (a 60:40 partnership with Mitsui) and the East Midlands franchise. The results will be announced in 2019. In December 2018, Abellio Germany started operating the Dieselnetz Sachsen-Anhalt and Rhein-Ruhr-Express franchises. The Stuttgarter Netz (STN), S-Bahn Rhein-Ruhr (SBRR) and Ruhr-Sieg-Netz (RSN2) will follow in 2019.

Finance

NS is continuing to invest in improvements for passengers, but the financial results will need to improve over the next few years if NS is to remain capable of financing these investments independently. We will be able to absorb some of the increase in costs through expected growth in revenues but we are also implementing programmes aimed at improving the financial results.

Expected developments in the long term

Supply and demand

Over 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. A shortfall of 600,000 homes is forecast for the period to 2025. Amsterdam is predicted to grow to one million residents by 2030 and Utrecht's population will increase from 339,000 now to more than 400,000 in 2030. Good connections to public transport must be part and parcel of the major task of building new homes for the Netherlands. The demand for mobility will continue to grow, driven by greater population density and scarcity of land. The effect is intensified by the growth of hubs such as 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 when travelling by road, 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 to these parts of the Netherlands and the mobility that is so important for everybody should be on offer here too. That requires innovative, smart and tailored solutions.

Modes of transport

Technological developments digitisation, automation and robotics are progressing fast. The developments reinforce one another. Take the dramatic rise in mobile networks and devices and cheap Internet services, for example, or Big Data and self-learning systems (artificial intelligence). The developments are also affecting the mobility landscape. 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. At the same time, more and more new players are entering the mobility market, covering aspects that include payments, journey information and the journey to and from the station. What is more, younger generations in particular have a different attitude to mobility, with a shift from ownership to usage. 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 for improvements in mobility will need to become increasingly sustainable, for example by using sustainable energy sources instead of gas and coal. There is increasing awareness of climate and air quality (zero emissions). 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 are changing for cross-border travel, with sustainable travel by train preferred to air travel. NS provides sustainable mobility to more than 9 million passengers in the Netherlands every year, thereby assisting the economic development and accessibility of the cities and the regions, as well as helping the Netherlands achieve its climate objectives. Since January 2017, our trains have been running entirely on wind power; we are the first country in the world where all the electric trains run on new wind power. NS also participates in the mobility consultative body for the climate agreement.

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 its partners, which include ProRail and the Ministry of Infrastructure and Water Management. One aspect of this is the High-Frequency Rail Transport Programme. Running Intercity trains six times an hour on the key routes will lead to a substantial increase in the transport capacity. We have taken a significant step in this direction with the increase in 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, a greater chance of finding a seat and higher customer satisfaction scores. NS will be focusing on implementing the Long-Term Rail Agenda further in the next few years. NS and ProRail have conducted a joint study to see which are the next corridors that would benefit from an increase in the number of Intercity trains per hour. This identified the Schiphol-Utrecht-Nijmegen corridor as one of the corridors with a high level of urgency. Preparations have now started for an increase in the frequency 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 of mobility in the Netherlands. We are doing this in part in the vision of 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, car, freight, ferry, bus, tram, metro and rail transport sectors. The Mobility Alliance is focusing on an ambitious plan with a vision of mobility in the period to 2030. It has started pilot projects on paying for usage.

The connecting theme in these visions of mobility is that the Netherlands needs an integrated mobility system 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 elsewhere with 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 to and from the station, for instance with an ever better journey planner, journey information, good bicycle storage facilities and OV-fiets. This is how NS is both helping keep the Netherlands accessible and make it more sustainable.

Developments in the regulation of the Dutch railway market

Over the next few years, three developments will affect the setup of the Dutch railway market and consequently the position and role of NS: decisions by the Dutch cabinet about market regulation on the Dutch railways, the decision by the cabinet to change the status of ProRail, and EU decision-making concerning the Fourth Railway Package. 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 over the next while and that this will put pressure on the results for both passengers and freight. There is also still a considerable lack of clarity because the legislation proposes making the arrangements for many tasks at a later date in secondary regulations. Finally, the new situation will be highly complex from a legal perspective. It is not yet clear how

various important aspects will be handled. For instance, it is unclear what will happen to existing contractual and partnering relationships with transport carriers and contractors on the railways. 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 are giving priority to passengers, passengers and passengers.

NS Group



Report by the Supervisory Board



For NS, 2018 was a year in which the organisation could concentrate fully on optimising its performance. NS achieved good results in the franchise KPIs for the main rail network in the Netherlands. It is important to sustain that level of performance, in part in the interests of passengers and the midterm review. NS's new mission and vision were agreed in 2018. The new strategy this entails is now being developed. To keep NS financially sound in the future, the company has started a programme focusing on improving financial results now that the basic operation is functioning as it should.

Strategy

The NS strategy *Spoorslags Beter* (2016–2019) identifies three core tasks: improving performance on the main rail network (including the HSL South), creating world-class stations, and helping the entire door-to-door journey. The Executive Board, supervised by the Supervisory Board, is responsible for implementing the strategy. Please see the report by the Executive Board for a description of the strategy.

Main rail network

The Supervisory Board is updated frequently on progress and developments in the key areas and the performance of NS in the franchise KPIs for the main rail network. The results, developments and ongoing and planned actions and projects are discussed in depth in every meeting. NS achieved good results in the franchise KPIs for the main rail network in the Netherlands. Firstly, it is important to maintain the current results because of the midterm review in 2019. There are also specific operational challenges, including performance on the High-Speed Line. NS is making every effort here to provide the best possible service. Independent research also shows that NS and ProRail have done everything they can to improve performance on this line. However, the current infrastructure and NS rolling stock have their limitations and investment is required. NS is aiming to improve performance over the next few years for example by updating the software and introducing new Intercity trains. Some milestones last year were the start of the Eurostar service between Amsterdam and London along the High-Speed Line and the start of the IC Brussels service. It is becoming increasingly important to have energy-efficient connections between Western Europe's major cities. The train has an important role to play here, for example as an alternative to plane travel. In this regard, NS is looking at cutting the journey time for the Berlin service.

Stations

Stations are an inherent part of NS. The station experience accounts for 25% of the customer satisfaction score. As in the past, NS invested in improvements to stations last year, such as pleasant waiting rooms and upgrades to the toilets. NS is also installing 200 water taps at stations in an effort to reduce the use of plastic bottles.

NS's retail policy is to let the market do what the market is now best able to do. NS is continuing to operate the Kiosk, StationsHuiskamer, AH to go and Railcatering businesses itself. The NS HEMA shops were transferred to the company HEMA on 1 October 2018 and the Broodzaak shops were transferred to HMSHost on 1 December. The transfer of the Starbucks outlets was completed on 1 January 2019 and the Smullers transfer is expected to be concluded in the first half of 2019. The Supervisory Board finds it important that these procedures are conducted with due diligence and it is monitoring the process to ensure that; after all, the staff working in these outlets are affected too.

Now that the refurbished Eindhoven station has come into operation, passengers can enjoy the space and facilities appropriate for a modern-day and future-proof station. Stations have become centres for economic activity. Large numbers of people work in and around stations. NS sees many opportunities over the next few years for property development, for example buildings above the track.

Door to door

NS is just one of the elements in the passengers' journeys from door to door. That is why the company also wants to make a contribution to the first and last stages of the journey. Use of the public transport bicycle (OV-fiets) continues to rise; in the past year, NS added thousands of new bicycles. Parking facilities for bicycles and cars are also still expanding. The NS Zonetaxi service was extended last year: as of December 2018, NS Zonetaxi is available at an additional 244 stations and passengers can make use of NS Zonetaxi at 377 stations for their public transport journeys. Despite all this, it remains a challenge for NS to coordinate matters with its partners and to recoup its investments in the transport to and from the station in the longer term.

Abellio's strategy

The foreign operations, run through our subsidiary Abellio, focus on two deregulated European markets: Germany and the United Kingdom. This means that good public transport is an export product for NS. NS also gains opportunities to acquire know-how and experience in passenger transport in foreign markets and in bidding for and operating franchises. An important precondition is that the risks associated with Abellio must be controllable. We discuss this regularly with the Executive Board and our shareholder, covering such issues as the risks associated with Brexit. The Supervisory Board regularly reviews Abellio's strategy, paying attention to its markets and performance and what it means for passengers in the Netherlands. The performance and financial results vary between franchises. The Supervisory Board considers this regularly. In the Greater Anglia franchise, there is a dispute with the franchise authority about the risk-sharing mechanism (CLE), which has led to an increase in the franchise fee. This may have financial consequences for Abellio and also affects other carriers in the United Kingdom. We are monitoring how this develops.

The future for NS

NS is concentrating first on delivering good performance in the interests of passengers and the midterm review in 2019. The Supervisory Board is closely involved in formulating the strategy of NS for after 2019. A temporary committee was put together with three members (Marieke van Lier Lels, Pim van der Feltz and Gerard van de Aast) that was closely involved in the formulation of the new mission and vision. We consulted regularly with groups of NS staff headed by Executive Board member Tjalling Smit. In this process, we gave recommendations. The new strategy is now being developed; that process is due to be completed in mid-2019. In a meeting with 30 CEOs and directors, the Supervisory Board and the Executive Board discussed themes such as the business model, innovation, data, the political context, the NS 'signature' and other themes of social relevance. The recommendations that NS received on that evening will be taken into account in the development of the NS strategy for the future. NS's goal is to keep the Netherlands accessible for everyone.

Oss

On 20 September, an appalling accident occurred at a level crossing with barriers in Oss, in which four children died. This was a tragedy for the victims, an unbearable loss for the families, relatives and friends and an incredible shock for the NS colleagues who were directly involved. On behalf of the Supervisory Board among others, NS offered its condolences to all those involved.

Individual redress for the Second World War

NS operated trains during the Second World War on instructions from the occupying forces. This is a black page in the history of the country and of our company. A past that we should not avert our eyes from. Various conversations with Mr Salo Muller, a Holocaust survivor, have shown that people still feel the need for individual compensation. NS does not believe that anyone benefits from lengthy legal proceedings. A committee started work in January 2019 under the chairmanship of Job Cohen. It has been tasked with handling individual compensation on moral grounds to an as yet undefined group of survivors and their direct descendants. The Supervisory Board endorses this.

Finance

It is crucial for NS to remain financially sound in the future as well. NS has invested substantially in new trains and IT, among other things. These investments are much needed but the outlay needs to be recouped. Passenger numbers are growing. However, NS only has limited options for growing its income. Fares for train tickets are subject to agreements with the government. However, NS has made a great effort in the past year to achieve savings and improvements in financial results, for example reducing the costs for overheads and the head office by €50 million and by implementing savings worth €100 million over the next few years in its operations through more efficient business practices. The Supervisory Board attaches great importance to this because of its focus on keeping NS future-proof.

Safety

Safety is a topic that is regularly on the Supervisory Board's agenda. The Supervisory Board considers personal safety as well as railway safety and terrorism. Safety affects both passengers and staff. By attending internal exercises in this area, Supervisory Board members can see how it functions in practice. Last year, the Board also looked at the Tilburg staff project tROM. In this project, people on unemployment benefit worked between 2004 and 2011 on trains belonging to NS and the Dutch Railway Museum at the former NedTrain workshop in Tilburg. An independent committee has drawn conclusions based on the results of an investigation by the National Institute for Public Health and the Environment (RIVM), and made recommendations. According to the committee, the municipality of Tilburg, NS and the Dutch Railway Museum all cut corners. That is why all the parties worked together to come to an arrangement at the start of February 2019, each taking their share of the responsibility, with the aim of providing clarity to the people affected as soon as possible.

The question of whether NS staff may have been exposed to hexavalent chromium in the past (and if so, to what extent) is also being investigated.

Investments

NS is investing substantially in new trains and IT, among other things. The FLIRT trains and first New Generation Sprinter trains are now running. The new Intercity trains will be brought into operation from 2021 onwards. The decisions to make those investments were taken before 2018. In the past year, the Supervisory Board considered proposed investments in 88 additional Sprinter trains and bids for new franchises in Britain and Germany.

Risk management

The Supervisory Board concludes that NS has made significant progress in the past two years in developing a more professional approach to risk management. The Supervisory Board was able to supervise these developments in part through the meetings of the Risk and Audit Committee. The target set by the Executive Board in 2016 of having a mature risk management system has largely been achieved. As part of this, the (quantified) risk appetite was recalibrated and extended in 2018. The Supervisory Board receives a report every quarter on the risk appetite. Changes had already been made to the risk governance setup at NS. The Supervisory Board and Executive Board concur that risk awareness has increased at NS and risk management is increasingly embedded as a control instrument in the organisation. Over the course of 2018, the Supervisory Board discussed the development of an internal control framework (ICF) on a number of occasions. The necessary preconditions, such as a supporting IT system, have been delivered. The ICF has been implemented for a number of processes. It will be rolled out further over the next few years. The Supervisory Board will pay close attention to developments in the ICF in 2019. The Supervisory Board arranged to be informed in detail on the risks NS faces in cybersecurity and how it tackles them. NS has drawn up an action plan aimed at making progress in controlling this risk by the end of 2019. Cybersecurity is one element of the risk reports that the Supervisory Board receives. A key point for attention in the first half of 2018 in particular was how NS was implementing the new GDPR legislation. Progress and the implementation were on the agenda on several occasions.

Corporate governance

Functioning of the Supervisory Board

The Supervisory Board reflects regularly on its functioning (both the board as a whole and the individual members) and how the board as a whole and its committees fulfil the supervisory task. This topic is also addressed in contacts among members and verbal evaluations that take place between the formal meetings, which fits with the Supervisory Board's aim of making continual improvements. The Supervisory Board performs a self-assessment every year and conducts an evaluation with external support of how it functions every three years. That evaluation took place again in 2018. The Supervisory Board has discussed the findings in detail.

The general conclusion from the investigation is that the Supervisory Board functions well. One point for improvement that has been implemented is the introduction of a 'non-executive session' prior to meetings with the Executive Board. In this session, the Supervisory Board members discuss the agenda for the meeting and update one another on contacts with NS colleagues, for example in working visits.

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

The Executive Board has 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. The Supervisory Board finds it important not to try and do the Executive Board's job; instead, it challenges the Executive Board's members, monitors decision-making keenly and supervises this process. At the suggestion of the Supervisory Board, the Minister of Finance, Mr Wopke Hoekstra acting in his role as shareholder, extended the appointment of Roger van Bortel as Chairman and CEO of NS by one year to August 2020. This means that NS will be able to complete the midterm review under the leadership of Roger van Bortel.

Changes to the Executive and Supervisory Boards

Executive Board

NS changed its senior management structure in 2016 in line with the *Spoorslags Beter* strategy. The Executive Board was expanded from two members to five. The Executive Board was at full strength with the intended five members for the whole of 2018. There were no changes in the members.

On 21 February 2019, Susi Zijdeveld announced that she would be leaving NS on 1 May. As Chief Governance, Risk & Compliance Officer in the Executive Board, she is responsible for improving the level of professionalism of operations and risk management within NS. She is also responsible for NS Stations. Under her leadership, all the points for improvement have been dealt with vigorously that were identified following the irregularities in the tendering process for public transport in Limburg and the recommendations by the committee for the parliamentary inquiry into Fyra. Furthermore, the GDPR was implemented in NS and a privacy office set up. She has also made significant progress in the areas of safety and crisis management. The Supervisory Board thanks Ms Zijdeveld for her hard work and contributions over the past few years and wishes her every success in her further career. The Supervisory Board has now started a procedure for finding her successor.

The Supervisory Board

The Supervisory Board has been back at full strength, with six members, since 2017. There were no changes in the members.

Meetings of the Supervisory Board and its committees

The Supervisory Board met seven times in 2018, of which two meetings were by phone. With the exception of one member who was absent on one occasion, all Supervisory Board members attended all the meetings. The average attendance of these meetings was 95%. One away-day took place with just the Supervisory Board members. The Supervisory Board has two permanent committees, namely the Risk and Audit Committee, and the combined Remunerations and Appointments Committee. All the committee members attended all committee meetings (100%). The Supervisory Board also set up an *ad hoc* committee for strategy in December 2017. This committee advises the Executive Board on formulating the strategy for after 2019. The current strategy (*Spoorslags Beter*) applies up to 2019.

Risk and Audit Committee

The Risk and Audit Committee consists of Gerard van de Aast, Pim van der Feltz, Jeroen Kremers, Marika van Lier Lels, Paul Rosenmöller and Janet Stuijt. Jeroen Kremers, the Supervisory Board's financial expert, is the chairman. The committee met four times. The Chairman and CEO, the Finance Director and the Chief Governance, Risk & Compliance Officer, Audit Director and the external auditor are also invited to these meetings. Depending on the agenda, other individuals such as the directors of Legal, Group Control & Expertise and Risk are also invited. The main topics were the financial statements, the annual report, the six-monthly figures, the budget, the group plan for 2019-2023, risk management (including the outcomes of the stress tests) and risk appetite, audit plans and reports, reporting and management letters from the external auditor, progress in IT projects and risk control, the tax position and progress in the project implementing the recommendations made by Alvarez & Marsal (NS in Control).

Remunerations and Appointments Committee (combined)

The Combined Remunerations and Appointments Committee has Paul Rosenmöller as its chair and Gerard van de Aast and Janet Stuijt as members. The committee met three times in 2018. As of December 2018, the Chief Governance, Risk & Compliance Officer joined the meetings alongside the Chairman and CEO because the HR reporting line has changed at NS. 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, both as a team and as 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 continued to be on good terms with the shareholder in 2018. We are in regular contact in a professional setting.

Employee participation

In 2018, elections were held within NS for the employee participation bodies. The collaboration with the new Works Council still needs to be fleshed out but relations are good.

Relationship with the external auditor

The external auditor attends all meetings of the Risk and Audit Committee as a matter of course. The external auditor also attends the meetings of the entire Supervisory Board when the financial statements and six-monthly figures are discussed. The Risk and Audit Committee also talks to the external auditor without the Executive Board present. The functioning of the external auditor is evaluated meticulously.

Financial results

NS achieved a net profit of €106 million this year, compared to a profit of €46 million in 2017. The underlying profit (disregarding one-off items) rose from €131 million in 2017 to €205 million in 2018. A proposal has been made to pay a dividend of €37 million, which is 35% of the result for 2018. The Supervisory Board critically assessed the results and discussed them with the external auditor.

NS has an ambitious investment programme of nearly €4 billion euros 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. As a result, NS will improve quality for passengers. NS is also investing €3.5 billion abroad, in particular in the lease of rolling stock.

About this report

The financial statements for 2018, 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 2018 financial statements. We also invite our shareholder to discharge the Executive Board and the Supervisory Board from its liabilities. The profit appropriation proposed by the Supervisory Board can be found in explanatory note 24 of the financial statements. Thanks to the efforts and the contributions made by all NS staff in the Netherlands and abroad, NS has been able to concentrate once again this year 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 staff and the Executive Board, and hopes it will be able to count on their great dedication and enthusiasm in 2019 as well.

Utrecht, 21 February 2019

The Supervisory Board

Who's who on the Supervisory Board

Gerard van de Aast, chair (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 Philips Lighting NV, member of the supervisory board of Witteveen+Bos, member of the supervisory board of Heisterkamp Transportation Solutions



Pim van der Feltz (1964), Dutch nationality (m)

- Appointed on 1 May 2017 until 2021
- Background: director of Google Netherlands
- Other positions held: member of the supervisory board of the Kröller-Müller Museum, member of the supervisory board of Platform Bèta Techniek (up to 31 December 2018), member of the advisory board of the Dutch Organisation for Scientific Research (NWO)



Jeroen Kremers (1958), Dutch nationality (m)

- Appointed on 26 January 2012 and reappointed in 2016 until 2020
- Background: former vice-chairman & chief risk officer, managing board, Royal Bank of Scotland NV and head of Global Country Risk, RBS Group
- Other positions held: member of the senior advisory board of Oliver Wyman Consultancy, chair of the supervisory board of Robeco, chair of the supervisory board of Über Payments, Crown-appointed member of the supervisory body for lawyers, member of the capital market committee of AFM



Marike van Lier Lels (1959), Dutch nationality (f)

- Appointed on 3 February 2016 until 2020
- Background: COO of the Schiphol Group until 2005, thereafter professional supervisory board member
- Other positions held: non-executive director of RELX PLC, member of the supervisory board of Dura Vermeer, chair of the supervisory board of Innovation Quarter



Paul Rosenmöller (1956), Dutch nationality (m)

- Appointed on 1 June 2007 and reappointed in 2015 until 2019
- Background: chair of the Secondary Education Council
- Other positions held: chair of the supervisory board of the Netherlands Authority for the Financial Markets



Janet Stuijt (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



Remunerations of the Supervisory Board

The remunerations of the Supervisory Board can be found here.

Remunerations of the Executive Board

The key objective of the NS remuneration policy is that this policy 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 policy of state participations.
- The determination of job grades is an important element in determining 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 the Environment, ProRail and Vitens) and the Dutch private sector, using weights of 60% and 40% respectively.
- NS pays 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 when the remuneration is determined, it is done so taking into account 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 in the Corporate Governance Code.

Remuneration components

- Base salary
- Variable remuneration
- Pension
- Benefits

The financial statements contain a table in Section 2 of the Financial Statements showing all the remuneration components.

Base salary

In 2018, the gross annual base salary including the holiday allowance for the members of the Executive Board was as follows:

| | | Base annual salary as at 31 December 2018 (EUR) | Base salary received (EUR) in 2018 |
|------------------------|--|--|---|
| Mr R.H.L.M. van Boxtel | Chairman and CEO | 468,188 | 460,294 |
| Mr H.L.L. Groenewegen | Finance Director | 367,206 | 361,014 |
| Ms M.E.F. Rintel | Director of Operations | 367,206 | 361,014 |
| Ms S.M. Zijdeveld | Chief Governance, Risk & Compliance Officer | 367,206 | 361,014 |
| Mr T.B. Smit | Commerce & Development Director | 367,206 | 361,014 |

The difference between the annual base salary and the base salary received is due to the fact that the salaries were increased by 2.3% as of 1 October 2018 as a result of the collective labour agreement. This is in line with the remuneration policy. The overall income of the employee with the highest base salary, namely the Chairman and CEO, is nine times the median value of the salaries of all NS staff in the Netherlands¹.

Variable remuneration

All members of the Executive Board have explicitly waived the right to variable remuneration in their employment contracts.

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 €73,385 in 2018 (2017: €68,547). The employer pays two thirds of the total pension costs.

| | Position | Pension costs (EUR) |
|------------------------|---|---------------------|
| Mr R.H.L.M. van Boxtel | Chairman and CEO | 14,677 |
| Mr H.L.L. Groenewegen | Finance Director | 14,677 |
| Ms M.E.F. Rintel | Director of Operations | 14,677 |
| Ms S.M. Zijderveld | Chief Governance, Risk & Compliance Officer | 14,677 |
| Mr T.B. Smit | Commerce & Development Director | 14,677 |

As required by legislation, pension accrual is capped at a salary of €105,075. 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 salary in excess of €105,075 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 2018, members of the Executive Board received a contribution on the same basis as in the above scheme for NS employees.

| | Position | Alternative for capping the pension accrual (EUR) |
|------------------------|---|---|
| Mr R.H.L.M. van Boxtel | Chairman and CEO | 42,626 |
| Mr H.L.L. Groenewegen | Finance Director | 30,713 |
| Ms M.E.F. Rintel | Director of Operations | 33,272 |
| Ms S.M. Zijderveld | Chief Governance, Risk & Compliance Officer | 30,713 |
| Mr T.B. Smit | Commerce & Development Director | 30,713 |

Benefits

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

¹ Basic assumptions: All staff at NS and Abellio Nederland who were employed by NS 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 staff and the Chairman and CEO. Both full-time and part-time staff are included in the calculation.

The benefits package for the Executive Board also includes an appropriate expense allowance, a lease car and the use of communication devices. The lease scheme offers the option of waiving the right to a lease car and being paid the gross lease amount instead. Board members can also make use of a chauffeur-driven directors' car. This directors' car should only be used for business trips. NS takes this to include business trips not directly associated with the job, but where private use is unavoidable given the combination with the obligations associated with the position at NS. An addition to the taxable income is applied for the directors' car because of this use that is not directly linked to the job. As the addition to the taxable income is caused by private use that is unavoidable given the combination with the obligations associated with the 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 as a net amount.

| | Position | Payment of lease amount (EUR) | Remuneration for additional tax liability of director's chauffeur-driven car | Expense allowance |
|-------------------------|---|-------------------------------|--|-------------------|
| Mr R.H.L.M. van Boxtel* | Chairman and CEO | - | 11,093 | 4,368 |
| Mr H.L.L. Groenewegen | Finance Director | 16,920 | 2,738 | 4,368 |
| Ms M.E.F. Rintel | Director of Operations | 2,784 | 2,738 | 4,368 |
| Ms S.M. Zijdeveld | Chief Governance, Risk & Compliance Officer | 16,920 | 2,738 | 4,368 |
| Mr T.B. Smit | Commerce & Development Director | - | 2,738 | 4,368 |

* Mr van Boxtel used the directors' chauffeur-driven car in 2018 and this was compensated by waiving the gross payment of the lease amount. Ms Rintel and Mr Smit had lease cars in 2018. Ms Rintel did not use the entire lease allowance and therefore received payment of a portion of the lease amount. Mr Smit did use the entire lease allowance and therefore did not receive any such payment.

The company has not extended any loans, advances or guarantees to members of the Executive Board.

Employment contracts

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

| | Position | Appointment date | End of appointment |
|------------------------|---|-------------------|--------------------|
| Mr R.H.L.M. van Boxtel | Chairman 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 |
| Ms S.M. Zijdeveld | Chief Governance, Risk & Compliance Officer | 1 February 2016 | 31 January 2020 |
| Mr T.B. Smit | Commerce & Development Director | 1 April 2017 | 31 March 2021 |

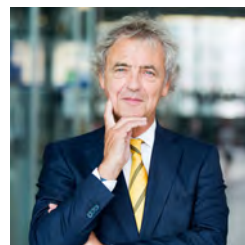
All employment contracts with members of the Executive Board include a period of notice for the employer of four months.

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.

Personal details – Executive Board

Roger van Boxtel (1954), Chairman 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
- Background: Dutch Law (University of Amsterdam)
- Career includes VNG, AEF, Member of Parliament in Lower House and Upper House (party chair), Minister for Cities and Integration and IT, CEO of Menzis



Bert Groenewegen (1964), Finance Director, 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 (1967), Director of Operations, Dutch nationality

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



Tjalling Smit (1977), Director of 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



Susi Zijderveld (1969), Chief Governance, Risk & Compliance Officer, Dutch and Canadian nationalities

- Focus on: NS Stations, property, retail, legal affairs, risk management, group-wide safety, internal audits, integrity & compliance, HR
- 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, 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 gives an account of 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 an account of 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'). As NS is not quoted on the stock exchange and does not have a one-tier management structure, some parts of the Code do not apply.¹ NS provides an overview on its website of all the Code stipulations along with information on how NS applies those stipulations.

Executive Board

The Executive Board bears the responsibility for managing the company. It reports to the Supervisory Board and the General Meeting. The Executive Board draws up 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, some 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 in the General Meeting. Members of the Executive Board are appointed or reappointed for a period of four years at most. The Executive Board currently consists of five people with the following functions: Chairman and CEO, Finance Director, Chief Governance, Risk & Compliance Officer, Director of Operations and Director of Commerce & Development.

The Executive Board did not change in 2018. It consisted of the following individuals: Mr Roger (R.M.L.H.) van Boxtel, Chairman and CEO, Mr Bert (H.L.L.) Groenewegen, Finance Director, Ms Susi (S.M.) Zijderveld, Chief Governance, Risk & Compliance Officer, Ms Marjan (M.E.F.) Rintel, Director of Operations, and Mr Tjalling (T.B.) Smit, Director of Commerce & Development. The remuneration and terms and conditions of employment of the Executive Board members are established by the Supervisory Board with due regard to the remuneration

¹ The following best-practice stipulations are not applicable given that NS is not quoted on the stock exchange and does not have a one-tier management structure: 1.3.6, 2.1.3, 2.3.8, 2.3.9, 2.7.5, 2.8, 2.8.1 to 2.8.3, 3.1.3, 3.3.3, 3.4.2, 4.1.6, 4.1.7, 4.2.2 to 4.2.6, 4.3, 4.3.1 to 4.3.6, 4.4, 4.4.1 to 4.4.8, 5.1, 5.1.1 to 5.1.5.

policy established by the General Meeting. The employment contracts of the members of the Executive Board include the right to compensation upon dismissal, up to a maximum that has been fixed on the initiative of NS 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, they take aspects such as safety and our role 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 chairman of the Supervisory Board and other members of the Executive Board. 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 therefore no decision can be made by the Board, the decision will be made by the Supervisory Board. The Supervisory Board must give its approval beforehand to decisions made by the Executive Board about such matters as entering into transactions that involve conflicting interests that are of material significance to NS and/or the member in question of the Executive Board. Such transactions are published in the report by the Executive Board, stating the conflicting interest. There were no such transactions in 2018. 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 policy was observed in 2018.

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 the 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 it requires in order to do its work properly. If the Supervisory Board and/or a member of the Supervisory Board considers 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 did not change in 2018 and consisted of the following individuals: Mr Gerard (G.J.A.) van de Aast (chair), Mr Jeroen (J.J.M.) Kremers, Ms Marike (M.) van Lier Lels, Mr Paul (P.) Rosenmöller (vice-chair), Ms Janet (J.L.) Stuijt and Mr Pim (W.J.) van der Feltz. 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 performing its duties properly and its members may adopt positions independently of 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 functioning of the Executive Board as a body and the functioning of the individual members of the Executive Board.

Supervisory Board members are appointed by the General Meeting, on the recommendation of the Supervisory Board and with due observance of the job profile and after consulting the Central Works Council. The Central Works Council has enhanced rights that let it nominate 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 the Board's members. The Supervisory Board aims for a composition that is diverse, with a good mix in terms of gender and age. The profile is evaluated every three years to ensure it is up to date and correct. All of the Supervisory Board members are independent in the sense 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 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 interest relating to NS without delay to the chair of the Supervisory Board. If the chair is concerned, they 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 a 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 decision-making. 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 members of the Risk and Audit Committee are independent in the sense of the Code. The Risk and Audit Committee advises the Supervisory Board and prepares the Supervisory Board's decision-making with respect to monitoring the integrity and quality of NS's financial reporting and the effectiveness (and assessment thereof) of NS's internal risk management systems and control systems. The Risk and Audit Committee meets 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 present. The rules of procedure stipulate that the RAC must have at least three members. All members of the Supervisory Board are also members of the RAC.

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, in accordance with the provisions of the Code. The Remunerations and Appointments Committee consists of three members, all of whom are independent in the sense of the Code. The current members of the Remunerations and Appointments Committee are Mr P. Rosenmöller (chair), Ms J.L. Stuijt and Mr G.J.A. van de Aast.

The Remunerations and Appointments Committee prepares the decision-making of the Supervisory Board in areas such as the appointment of the members of the Executive Board and the Supervisory Board, the functioning of the Executive Board and the Supervisory Board, and the formulation of the remuneration policy for the Executive Board and its implementation. The Remunerations and Appointments Committee draws up an annual report about the remuneration policy for the members of the Executive Board and the implementation thereof.

The Supervisory Board determines the remuneration of individual Executive Board members based on the proposals from the Remunerations and Appointments Committee, 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 decides the selection criteria and procedures for appointing members of the Supervisory and Executive boards, as well as periodically reviewing the size and composition of the Supervisory Board and proposing a profile for its makeup. It is also responsible for the process for periodic appraisal of the functioning of the individual Supervisory Board members. Furthermore, it presents proposals for the appointment or reappointment of Supervisory Board members.

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 produces an audit opinion regarding the truth and fairness of the NS financial statements.

The Risk and Audit Committee provides the Supervisory Board with an annual report about the functioning of the external auditor and the developments in the relationship with the said 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. The auditor 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 chairman of the Risk and Audit Committee if it encounters actual or suspected abuses or irregularities in the course of its audit task. 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 financial year 2014.

NS Audit

The NS Audit Director reports directly to the Chief Governance, Risk & Compliance Officer in the Executive Board and discusses the operational affairs of the department. The NS Audit Director also reports to the chair of the RAC. The NS Audit Director has direct access to the NS Chairman and CEO, the chair of the Risk and Audit Committee, the members of the Executive Board and the NS directors according to the articles of association, and the external auditor.

The internal audit function keeps the Executive Board, Risk and Audit Committee and external auditor informed about:

- the implementation of the audit year 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 the internal audit function.

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 body that is chaired by the Chief Governance, Risk & Compliance Officer. Line managers responsible for the business units, IT and security report to this central body on safety risks. The Chairman and CEO and the NS Risk Director also attend the Safety consultation body meetings. The NS Risk Director makes sure that the chosen risk appetite is reflected properly in the management of the safety risks.

Organising sustainability

Sustainability of the business practices within NS is safeguarded through a formal organisation consisting of a Council for Sustainable Business Practices, a Working Group for Sustainable Business Practices, a Communications Working Group and a number of temporary task groups. This organisation is supported by the head-office department Sustainable Business Practices. The Council is a body that prepares decisions and policies. The Council consists of directors of business units and head-office departments and is chaired by the Director of Commerce & Development. Proposed resolutions and policies that have to be implemented by the business units and/or corporate staff groups are submitted to the Executive Board for approval. The Working Group for Sustainable Business Practices includes representatives of the business units and NS head-office departments.

Sustainable mobility is one element in the NS strategy. This strategy is translated into plans and KPIs by the business units. The plans deal with the three strategic themes of Climate-neutral, the Circular Economy, and Inclusiveness. Progress and development in sustainability results are monitored and managed through the regular planning, control and reporting cycle. Investment proposals must include assessments of the sustainability impact.

In accordance with the Code, the Executive Board is responsible for the aspects of Corporate Social Responsibility (CSR) that are relevant to NS. The Executive Board reports on this to the Supervisory Board and the General Meeting. There were no changes in 2018 in the CSR policy and objectives.

Organisation of 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 the risk management we are aiming for in six risk themes at NS can be found in what are called the 'risk appetite statements'. Virtually all the risk themes are linked to specific performance indicators, some of them with quantitative bandwidths. The risk appetite in each theme is evaluated annually by the Executive Board and adjusted if necessary. In 2018, the Executive Board reduced the number of themes from eight to six. The 'Growth' and 'Staff' themes have been incorporated in the remaining themes as the effects of the risks in those two themes essentially fall under other themes. The Executive Board redefined its risk appetite for the six themes:

| Category | Risk appetite | Explanation, NS accepts |
|----------------|---------------|---|
| Safety | Averse | Zero or minimal deviations from safety objectives |
| Compliance | Averse | Zero or minimal deviations from integrity and compliance objectives |
| Operations | Averse | Zero or minimal deviations from operational objectives |
| 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 |

Compared with 2017, the Executive Board has changed its risk appetite in the category 'Finances' from neutral to risk-averse. That underlines the focus required on achieving sufficient returns. Given the investment agenda for the years ahead and the requirement for NS to finance this investment independently and by its own efforts, it can permit itself fewer risks. NS must achieve a result that will enable it to continue to obtain financing through the market, which necessitates a rating of at least A+. In 2019, we will also accept only minimal deviations from our financial objectives and we will remain risk-averse. The risk appetite is being made more explicit in line with the NS Risk Framework. Whereas we were using stress tests in 2017, in 2018 we developed the risk appetite reporting system with regular 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.

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. We therefore focused on developments such as the internal control framework, business continuity management and quantifying risks. Other measures that we use to manage our risks include the planning and control cycle, the Risk Framework and various investigations into incidents. They will be mentioned in various parts of this report. NS's philosophy regarding the support and assurance that risks are identified and managed in an integral approach has also been worked out in detail and translated into specific, measurable objectives.

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 with clear 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 system of risk management and internal controls is indeed working properly.

The collaboration that was started in 2017 between the Risk, Integrity & Compliance, Legal, Audit, Security and Information Risk Management departments was continued in 2018. This enhances the overall risk management, for example because year plans are aligned, which ensures more coherence in the planned activities from the perspective of the business side.

In 2018, NS worked further on the Internal Control Framework so that it could be demonstrably in control of key processes and systems. This is a uniform framework for documenting and monitoring processes and systems, risks, control measures and how they function. To this end, NS initiated and executed pilots for operational and financial reporting.

Risk management system

NS has implemented a system for the identification and control of risks, in which all levels of the organisation in the first line of defence are actively asked to focus on risk management. The Risk department aims to set up integral risk management together with other specialised risk departments and the operational business, and to make risk assessments systematically (weighing risks up against the risk appetite). The system consists of four components:

- Regular consideration of risks by the management in the form of risk assessments;
- Active monitoring to ensure risks are being managed properly within projects and programmes;
- 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 and will help NS to detect potential bottlenecks or opportunities at an early stage and make targeted and proactive changes in response. The degree of support by the second line of defence in these processes is determined on the basis of a risk assessment that is made beforehand.

Recording and reporting

Identified risks and the risk owners are recorded in risk registers. The various risk matrices and risk acceptance criteria that were used in the past in the different NS business units have now been harmonised and incorporated in a single uniform risk matrix. We expect this to lead to a better shared understanding of risk situations and consequently broader support for risk decisions. In 2018, NS made significant progress in several major projects on analysing and quantifying planning and budget risks where possible. This has led to better insights into project schedules and finances. We will be rolling this out further in 2019. We are also considering whether other areas could also benefit from quantification. Once a quarter, the main risks for each business unit are reported and discussed in the Executive Board as part of the planning and control cycle. The NS Risk department records the main risks in an Enterprise Risk Management system, which helps ensure a more uniform approach to risk management and a comprehensive overview of the risks. Risks that exceed the risk appetite thresholds are reported immediately and the situation is escalated, if necessary. The Executive Board reports on and renders an account of the risk management and internal control system to the Supervisory Board after discussing this in the Risk and Audit Committee.

Corporate culture

Risk management needs to become part of our DNA, but without paralysing the business operations. Staff are becoming ever more aware of risk, in part because of the activities and training organised by the NS Risk department. As a result, staff are openly discussing risks and incidents with the aim of further improving control. The NS Risk department 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 our company and without judging. The department helps come up with solutions that do justice to the various interests and help NS implement its strategy.

Statement by the Executive Board

The Executive Board believes that the systems of risk management and internal control concerning the financial reporting risks in the year under review functioned satisfactorily and give a reasonable degree of certainty that the financial reports do not contain any material misstatements. The report therefore gives sufficient insight 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.

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 materially relevant themes. The group risks are discussed in detail below, as are changes in the risk profile with respect to 2017. For the financial risks, please refer to the 'Financial risk management' chapter in the financial statements.

Key changes in the risk profile compared with 2017

Visible improvements have been made in the control of the risks associated with non-compliance, improvement capacity, the introduction of ERTMS, and poor operating results. Progress was made in 2018 in terms of both structure and corporate culture in the area of compliance, resulting in improved risk management. Control of risks associated with improvement capacity was improved by paying constant attention to portfolio management and by implementing changes to setups. As regards risks associated with ERTMS, various measures suggested by NS to mitigate poorer operational performance or unacceptable disruption for customers have been included in the proposed programme decisions. Regarding the operating result risks, the profit in 2018 was higher than expected and more specified savings have been included in the business plan. Control of the risks associated with investments abroad has worsened, largely due to external factors such as Brexit, deficiencies in the infrastructure, changes in passenger behaviour and delays in the delivery of new trains. This was reflected in the disappointing results for ScotRail and Greater Anglia in particular in 2018.

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 biggest risks for the group in 2018 are found in four of the six risk themes. The overview also shows the trends in the control of these risks.

| Risk theme | Risk | Trend |
|-------------------------------------|--|-------|
| 1. Safety Averse | Safety: NS not fulfilling its duty in cases of major safety incidents with passengers and/or staff | = |
| 2. Compliance Averse | Non-compliance: Not complying with legislation and regulations or exceeding applicable norms and values. | + |
| 3. Operations Averse | HSL South: The risk that the performance delivered in 2018 is not in line with the agreements due to crowded trains, the complexity of HSL South and/or an inability to implement measures. | = |
| | Infrastructure: lack of infrastructure capacity and quality improvement backlog | = |
| | Introduction of ERTMS: disruptions to the implementation process cause problems for customers | + |
| | IT reliability: not meeting the operational and security requirements for IT systems or of legislation and regulations | = |
| | Capacity for improvement: providing improvements too late or with insufficient results | + |
| 4. Finance Averse | Insufficient operating results: inadequate operating results and not enough cash flow generated to let the plans be financed | + |
| | Market regulation: losing parts of the business activities and the contributions they make to the result | = |
| | NS investments abroad: insufficient operating results from foreign investments, e.g. because of the effects of Brexit and shortcomings in the infrastructure | - |
| 5. Reputation Averse | This risk is associated with all the major risks listed above. | |
| 6 Sustainability Tolerant | No major risks for the company have been reported within the 'Sustainability' theme. | |

-  Trend improved
-  Trend unchanged
-  Trend worsened

Safety

Description

The risk that NS fails to take sufficient measures to prevent safety incidents, or fails to fulfil its duty of care sufficiently 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. '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 terrorist threats).

Explanation

Proper and safe operations are always a focal point, given their importance for our operations. 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 the safety culture in 2015. On aspect of this was a survey among managers and staff, which was repeated at the start of 2018. The programme activities are being further refined on the basis of this. NS aims to grow towards a proactive safety culture in the long term and made progress in this direction in 2018.

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. We are improving control in this broad domain by tightening the NS-wide governance for safety, and by creating a more clear-cut organisation of the Quality, Health, Safety & Environment (QHSE) departments in each business unit, alongside the central organisation for Security. Significant progress has been made in the past period, but further growth is still needed to attain the required maturity. Improvements have been implemented in various safety areas, which has increased safety. Occupational risks and improvement measures regarding occupational safety have been mapped out and implemented using various risk assessments and evaluations (RAEs). With regard to railway safety, NS Operatie harmonised the three existing safety management systems and merged them to create a single safety management system. The trains are also being fitted with ORBIT, an acoustic signalling system that can reduce the number of stop signals passed at danger. As regards personal safety, bringing the access gates into operation at more and more stations is helping to increase safety on trains and at stations. NS is in close contact with public authorities and is kept posted of external developments in the world of safety.

The National Coordinator for Counterterrorism and Security has said that there is still a real risk of an attack on the railways. The stabbing incident at Amsterdam Centraal station on 31 August is a reminder that we need to remain alert. NS has updated its counter-terrorism 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 quick recovery). Practice runs were carried out in various areas in 2018 to make sure NS was properly prepared. They included table-top exercises by the NS Crisis Management Organisation, a major operational exercise at Amersfoort station involving the Ministry of Defence, the police, Utrecht Safety Region, the municipality of Amersfoort and ProRail, and numerous smaller-scale exercises, often in collaboration with specialised government agencies. With regard to IT security, NS reassessed the risks of cybercrime and made changes where necessary to ensure further improvements. NS also carried out a major programme in 2017 and 2018 in order to comply with the new General Data Protection Regulation (GDPR).

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 is still sound and consequently unchanged. Despite the measures, NS cannot rule out safety incidents occurring. According to the National Coordinator for Counterterrorism and Security, the general threat of terrorist attacks in the Netherlands remains high.

Non-compliance

Description

The risk that NS fails to comply with legislation 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 from supervisory authorities.

Explanation

NS aims to have properly controlled business operations, in which incidents are rare occurrences and legislation and regulations are complied with. To keep the number of incidents to a minimum, NS needs to fulfil a number of conditions. There should be a safe environment in which we can openly discuss incidents and carry out investigations into the background behind incidents in a way that increases our understanding. Learning from reports and situations can let NS generate insights and take measures to prevent recurrences.

New and changed legislation and regulations must be translated into specific policies that we can then implement in the organisation with supporting processes and systems.

Measures

NS complies with national and international legislation and regulations. The Integrity & Compliance department took further shape in 2018 and is now in a position to perform all its tasks. Policy has been formulated and a framework drawn up that clarifies the links with other departments and issues. The sessions we have organised during various team days and meetings have raised awareness among staff of the Integrity Portal. The information in the Integrity Portal is updated and supplemented regularly in response to the latest developments. In 2018, the NS scheme for reporting integrity issues (including 'whistle-blower' reports) was reviewed and amended. This was prompted by the GDPR legislation and the lessons learned. The NS Integrity Desk ensures that irregularities or suspicions of irregularities can be reported safely.

In response to the irregularities in the public transport tender in Limburg in 2015, the consultancy firm Alvarez & Marsal was commissioned by our shareholder and our Supervisory Board to carry out an investigation into the effectiveness of governance, risk and compliance (GRC) within NS. The investigation report concluded: "The GRC organisation within NS is not on a sufficiently sound footing to prevent irregularities and unethical conduct to the maximum extent possible and promote the desired conduct." Based on the conclusions and recommendations in the investigation report, NS has drawn up an improvement plan with specific objectives and actions. Nearly all measures have now been tackled. Some measures will take several years to implement, because they affect the entire organisation or because they are extensive by their very nature. In 2017, NS started a company-wide programme to encourage a culture of openness, taking responsibility and exemplary conduct throughout the organisation.

In 2018, NS organised sessions on a broad scale to encourage a more open and safer culture. These sessions were held among all levels of the organisation and always keyed into the questions and dilemmas that were relevant for the team or department in question. Delays or shortcomings in the compliance by NS with legislation and regulations may also result in reprimands, fines, court cases, claims and reputational damage. In 2018, we paid specific attention to the GDPR, which came into effect in May 2018. We set up and facilitated the transfer of expertise and the associated policy. The GDPR project team was disbanded at the end of 2018.

In close collaboration with ProRail, we set up a portal in which we offer services and facilities to all carriers in the context of the Railways Act in a transparent and non-discriminatory way.

Risk control trend

The structure and the strategy of the NS organisation have been incorporated in the business operations, and are supported by measures. Enhancing a culture of openness and approachability is a less straightforward change to make. Progress has been made in both areas (structure and culture) in 2018, and additional steps have been planned for 2019. This means our risk control has improved.

HSL service

Description

The risk that the performance delivered in 2018 is not in line with the agreements due to crowded trains, the complexity of HSL South and/or an inability to implement measures. The agreement with the Ministry of Infrastructure and Water Management about the performance on the HSL South covers both operational performance and the introduction of new products. If performance is not in accordance with the agreement, the HSL South will be put out to tender again and/or NS will be 'threatened' with this, which would damage the reputation of NS.

Explanation

The agreements made between the Ministry of Infrastructure and Water Management and NS about the performance on the HSL South are highly ambitious, taking into account the complexity and limitations of the infrastructure and NS's rolling stock. In 2018, the Brussels Intercity and the Eurostar were introduced on the HSL South. Delays in the delivery of planned customs facilities in Amsterdam and Rotterdam meant that passengers have to change trains in Brussels when using the Eurostar. The relevant public authorities are key for starting the passport checks. <check> Performance on the HSL South improved in 2018 initially. As expected, there was a decline between April and October following the introduction of product additions and a planned update of the software for the TRAXX locomotives. The planned improvement as of October due to new software did not materialise, but the minimum values for 2018 were achieved nevertheless. As a consequence, the remaining bandwidth is not as wide as NS would like. Performance on the HSL South (the KPIs) is volatile, with fluctuations from month to month. The HSL South performance lags systematically behind that of the main rail network. An external analysis carried out by Railistics and Triple Bridge concluded that the HSL South corridor is becoming ever busier following the product additions in 2018, which is making it increasingly difficult to cope with disruptions. 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 the HSL South and bringing performance up to a par with the main rail network. The complexity of the infrastructure and growth in passenger numbers combined with the current volatility of performance on the HSL South means it will be particularly challenging to achieve the KPI target for punctuality for passengers on HSL South (to 5 minutes) in 2019.

Measures

The expected dip in performance was kept under control thanks to NS and ProRail making every effort, including a test and validation programme and a controlled and phased introduction process. An essential software update failed to deliver improvements. Everything possible will be done to improve the software in 2019. Operational performance remains unstable, however. All the operational disciplines in NS are looking at this. In addition, the improvement programme and improvement teams are remaining active to monitor performance continuously, make sure that performance will be as good and stable as possible and to take any additional measures necessary and spur on improvements in the operations. The introduction of the New Generation Intercity trains will follow in the longer term.

Risk control trend

The Brussels Intercity and the Eurostar were introduced onto the HSL South on schedule. The structural issues will require patience and NS is accordingly giving the improvement of the HSL South performance its full attention.

Infrastructure capacity

Description

The risk that, due to numerous major interruptions to the service, lagging investment and political pressure on ProRail, there will be a shortage of rail infrastructure capacity and a deterioration in the quality, so that NS cannot achieve its growth goals and operational improvements to the extent it would like.

Explanation

In implementing its scheduled service, NS is dependent on having a sufficiently reliable rail infrastructure. More investment is needed to keep the infrastructure reliable and expand it. Withdrawals from service are needed to enable work to be done on the track. There were numerous planned withdrawals from service in 2018, resulting in less capacity temporarily. This will also be the case in the next few years. There are a number of factors that are putting additional pressure on the infrastructure capacity and infrastructure quality, both now and in the future. The number of passenger-kilometres will increase further and NS has ambitious growth plans. Safety and environmental requirements are increasing, including those for shunting yards, while the influx of new trains is increasing the demand for shunting capacity. Maintenance has been postponed in recent years, which is increasing the risk of unexpected disruptions and more withdrawals from service, in part to carry out the postponed maintenance.

Measures

NS has drawn up a comprehensive asset plan in which the timetable design is combined with the rolling stock, staff and infrastructure, looking at both the short term and the long term. This lets us and ProRail manage the infrastructure requirements in a more integrated manner in the longer term. A regular process is used to align the NS product additions and the necessary developments in the infrastructure at ProRail. Based on NS's rolling stock fleet planning, various future scenarios are developed and assessed, after which they are shared 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 work on the track. One example of this is the joint programme control aimed at minimising disruption to customers in the Amsterdam Diamond (the area between Schiphol, Amsterdam Zuid, Amsterdam Centraal and Weesp).

Risk control trend

The level of risk management remained the same in 2018. The fact that investment is lagging behind the growth in passenger-kilometres, the increasingly strict safety and environmental requirements and the planned withdrawals from service are leading and will continue to lead to problems with the infrastructure. This can have an adverse effect on the train services and the achievement of our goals.

ERTMS

Description

The introduction of ERTMS is associated with the risk that customers may experience major disruption or that its implementation may not lead to the expected results. Replacing the train safety system on the Dutch railways is a major and complex programme, which will affect the performance of NS. The roll-out will take a number of years. During this period, both the traditional safety system ATC (automatic train control, improved version) and ERTMS will have to be used in parallel.

Explanation

The ERTMS programme is very complex, as it comprises technical, operational and organisational elements. 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. The implementation of ERTMS on the Dutch railways affects both carriers and the infrastructure operator. Both the infrastructure and the trains have to be modified to make sure that ERTMS can be implemented. ERTMS will be rolled out and ATC removed per track section. The current ATC train safety system will remain in use during the roll-out, until all track sections have been equipped for ERTMS, in around 2050. Over the next few years, ERTMS will continue to develop as a European train safety system. The risk lies in the fact that the modifications are comprehensive in nature and none of the parties involved have ever done this before.

Measures

NS is making careful preparations for the introduction of ERTMS in close collaboration with the ERTMS programme directors, ProRail and the other carriers. The replacement of ATC by ERTMS on the first track section – currently planned for around 2028 – will be preceded by a migration action plan, to which a test track section has been added. Considerable time has now been reserved for tests compared with the previous timetable. What is more, various other measures suggested by NS to mitigate lower operational performance or unacceptable disruption for customers have been included in the proposed programme decisions. One of the key points is that the ERTMS programme directors are taking responsibility for minimising disruption to customers.

Risk control trend

The measures that have been taken have reduced the risk of disruption for customers. The risk that the implementation of ERTMS may not deliver the expected results has now been worked out in more detail by NS in partnership with the sector.

IT reliability

Description

There is continual demand for further development of our IT systems due to both operational and security requirements (in particular because of cybercrime risks). There is a risk of shortages of the right levels of expertise and capacity due to the tight labour market, as a result of which not all IT systems can satisfy the requirements. The consequence of this is that NS fails to live up to its strategic ambitions and cannot guarantee the continuity of its service.

Explanation

Reliable IT systems are needed 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 the control and adjustment of the timetable. To facilitate this, three cornerstones are crucial: a stable, efficient and scalable IT infrastructure; sufficient and qualified staff; and systems that are sufficiently manageable. There are currently risks for each of them. 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 increasingly a risk. The 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. We are making conscious choices within the IT portfolio to make sure we stay within the limits of scarce resources. For the recruitment of staff, NS works intensively with training institutions and suppliers of temporary staff. Centralisation and sound architecture are used for keeping the IT environment manageable.

Risk control trend

IT support for increasing our resilience in the face of cybercrime risks continues to require attention, both in the construction of new systems and in modifications of existing systems. In addition to the problems in recruiting permanent staff, it is becoming more and more difficult to recruit temporary staff too. Further reductions in financial and staffing resources may cause delays in improvements. The overall level of control is the same.

Capacity to make improvements

Description

The risk that the change programmes that have been initiated will not provide the required results (or will not do so on time), as a result of which NS fails to fulfil the agreements and expectations of its stakeholders.

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.

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. In 2018, a number of important setup changes were implemented in the operations following trials; the implementation is still demanding our attention. More changes to the setup will follow in 2019. We take information from measurements (employee engagement surveys, integrity and safety), the future of work and changes in the individual business units and turn this into an integrated change story and integrated approach.

Risk control trend

Control has improved thanks to improvements in the portfolio management and the above-mentioned developments such as the setup changes that have been implemented. Given the growing pressure on financial returns for the organisation, it is essential that the said improvements are made and that the number of programmes and projects are reduced so that it becomes clearer where responsibilities lie in the line management.

Inadequate operating result

Description

The risk that, due to costs rising faster than revenue, NS fails to achieve the required return on investment. This would lead to NS generating inadequate operating results and operational cash flows, rendering NS 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 so that it will be able 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. A good rating is important for attracting 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. In this regard, NS looks at staff, the deployment of rolling stock and the service model.

Risk control trend

NS takes measures to improve the results, whereby we aim to increase productivity and revenue in addition to reducing the costs of indirect and support staff activities. In recent years, including 2018, 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. Over the next few years, the need to have healthy returns will be given a higher priority again now that the operational performance is where it should be, and this will enable NS to continue financing its plans for the future and its investments independently. We do still need to implement initiatives.

Market regulation

Description

The risk that politicians decide on a different setup for the main rail network franchise or the position of NS Stations, which would affect NS's business operations and put pressure on the performance delivered to passengers. The State Secretary for Infrastructure and Water Management has announced that a decision will be taken in 2020 on the market regulation of the rail sector.

Explanation

The coalition agreement contains a small number of expressed intentions relating to the regulation of the railways that might affect NS. For example, the cabinet is investigating the possible decentralisation of four railway lines. The State Secretary for Infrastructure and Water Management has also announced a number of studies that will help her in the decision on the regulation of the rail sector. She will, for example, be looking at the ownership and operation of stations and a study of the HSL is planned. 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 and around stations. However, the HSL South is lagging behind, both because of its system and its rolling stock. NS is also on schedule for achieving its performance agreements. Furthermore, NS is working continuously on improving its services to passengers. NS is cooperating with the ministry's preparatory studies for the decision on the market regulation of the rail sector.

Risk control trend

Uncertainty concerning market regulation remains as great as ever. NS is constantly making every effort to ensure it can continue to deliver a good level of performance.

NS's investments abroad

Description

The 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 by controlling risks effectively and making sure that investments remain within the Capital-at-Risk framework. This framework was agreed with the Ministry of Finance in 2016 and limits the size of the investments abroad by NS and the guarantees provided by NS.

In 2018, the ScotRail and Greater Anglia franchises in the United Kingdom yielded disappointing results. Despite various improvement initiatives, passenger revenues are lower than expected due to:

- a. disappointing economic growth, in part due to 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. dependency on Network Rail's ability to deliver infrastructure projects on time.

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, there have been delays in the delivery of new trains for the ScotRail franchise and performance on the track is not up to the standards agreed with the franchise authority and expected by the general public, in part because of deficiencies in the infrastructure.

In Germany, revenue growth will be achieved over the next few years from €358 million in 2018 to over €800 million in 2021. This is because a number of franchises have been won that will become operational in the next few years. 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. This requires substantial investments, which affect the result because growth is so rapid.

Measures

Based on the agreements made with the shareholder, NS limits the financial risk associated with Abellio's operations to providing group guarantees and the invested capital. The size of the risk for certain franchises is kept down by entering into a strategic partnership, as in Greater Anglia where Mitsui has a stake of 40% in the franchise, and in West Midlands 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 are being prepared thoroughly using a programme approach with experienced managers. The 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.

Risk control trend

The above-mentioned measures will bear fruit in the short and medium term. It is still expected that all franchises will make a net positive contribution to the financial result over their term, but the results for ScotRail and Greater Anglia in particular were disappointing in 2018.

Finances in brief

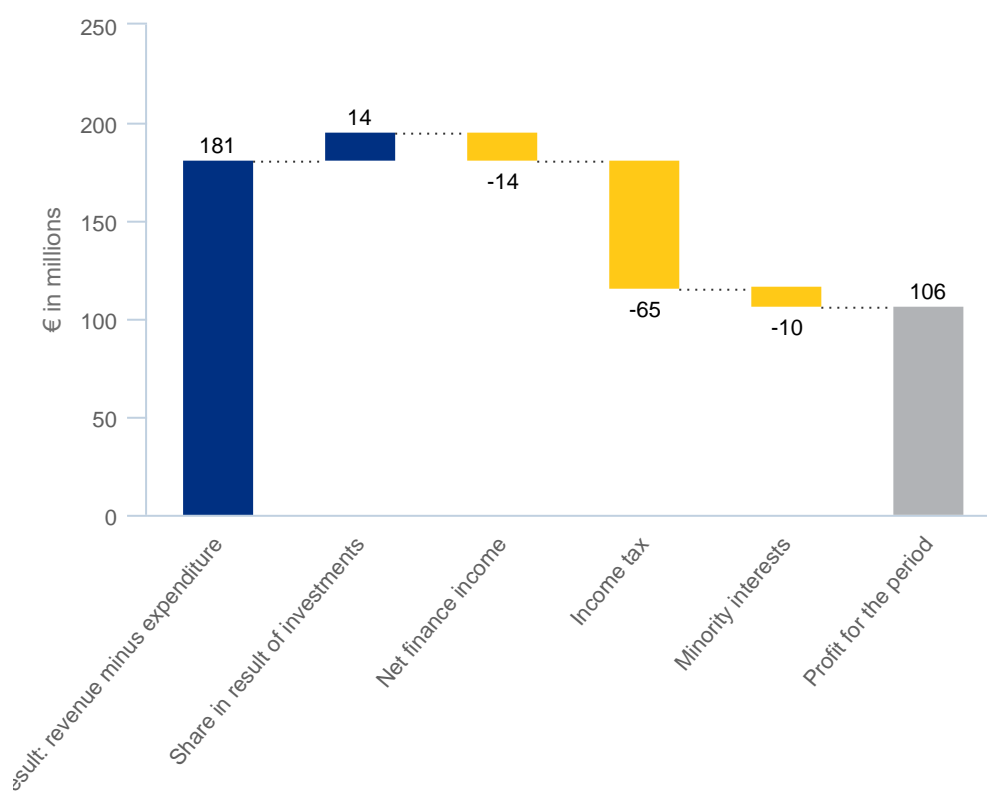


NS had revenues in 2018 of €5,926 million, an increase of 15.7%. Last year, NS invested €898 million, mainly in the procurement of new trains and upgrades of existing trains. NS achieved a profit from operating activities of €195 million (€57 million in 2017), with an associated net profit over 2018 of €106 million (€46 million in 2017). The profit from operating activities excluding exceptional income and expenditure was €205 million, €74 million more than in 2017 (€131 million).

| (in millions of euros) | 2018 | 2017* |
|---|-------|-------|
| Revenue | 5,926 | 5,121 |
| Operating expenses | 5,745 | 5,084 |
| | 181 | 37 |
| Share in result of equity-accounted investments | 14 | 20 |
| Result from operating activities | 195 | 57 |
| Net finance income | -14 | -5 |
| Pre-tax profit | 181 | 52 |
| Income tax | -65 | -5 |
| Minority interests | -10 | -1 |
| Profit for the period | 106 | 46 |

* Figures for 2017 have been adjusted to enable a proper comparison

Profit and loss account 2018



Operating revenue

Revenue was €5,926 million in 2018 compared with €5,121 million in 2017, an increase of 15.7%. Most of this increase, namely €574 million, was due to the start of the West Midlands franchise in the United Kingdom at the end of 2017. 2018 was the first complete year for this franchise.

| Revenue in 2017 | 5,121 |
|--|--------------|
| Revenue from rail transport in the Netherlands | 85 |
| Revenue from bus transport in the Netherlands | -129 |
| Station development and operation in the Netherlands | 14 |
| Revenue from rail transport in the United Kingdom | 721 |
| Revenue from bus transport in the United Kingdom | 3 |
| Revenue from rail transport in Germany | 111 |
| Revenue in 2018 | 5,926 |

Revenue in the Netherlands (€3,102 million in 2018, €3,132 million in 2017).

Revenue from rail transport in the Netherlands

The revenue from rail transport increased by 3.5% to €2,527 million (€2,441 million in 2017). If the loss of the Zwolle-Enschede and Zwolle-Kampen franchises (which NS no longer operated in 2018) is taken into account, the increase in revenue is 5.2%. This growth was partly due to the annual price indexation (1.2%) and a growth in volume, i.e. the number of passenger-kilometres (2.4%). There were also increases in revenue during peak periods and from first-class travel, which resulted in higher average revenues. NS achieved higher revenues largely through more revenue from individual journeys in both the social/recreational market and the commuting market (6.0%). There was also an increase in the revenue from the sale of season tickets in the social/recreational market and, in particular, the corporate market. Revenue from the student public transport pass fell slightly for NS due to the loss of the franchises mentioned above; adjusting for that franchise change gives a slight increase (1.0%). The upturn in the economy, growing purchasing power and the marketing campaigns targeting the off-peak hours had a positive impact on revenues. The number of people in employment in the Netherlands (an important factor in peak-hour traffic) grew by 2.2% in 2018.

Revenue from bus transport in the Netherlands

The revenue from bus transport in the Netherlands was zero in 2018 (€129 million in 2017) due to the sale on 31 August 2017 of Qbuzz to Bus Italia.

Revenue from station development and operation in the Netherlands

Revenue from station development and operation in the Netherlands increased by €14 million in 2018 to €576 million. This was due to higher rental income from having the retail formats Hema, Broodzaak and Shakies now operated as a franchise by third parties, and a like-for-like increase in sales for the franchise formats that we operate directly, including Kiosk and AH To Go. The positive economic development and the renovation and redevelopment of a number of stations, including Utrecht Centraal and Rotterdam Centraal, were factors in this growth.

Revenue in the UK (€2,467 million in 2018, €1,743 million in 2017)

Revenue from rail transport in the United Kingdom

The revenue from rail transport in the United Kingdom provided by Abellio increased by 49% in 2018, with organic growth of 10%, when denoted in pounds sterling. When converted into euros, the revenue was €2,267 million, an increase of €721 million on 2017 (€1,546 million). The revenue from the West Midland Trains franchise (€611 million in 2018, €37 million in 2017), which started on 10 December 2017, has been consolidated. The Greater Anglia and ScotRail franchises experienced organic growth of over 10%. The lower average value of the pound in 2018 compared to the average value in 2017 had a negative impact on the revenue when denoted in euros of €23.8 million, which depressed the growth denoted in euros by more than 1%. Merseyrail, the joint venture with Serco in which Abellio has a 50% stake, recorded revenue growth of more than 5% in euros.

Revenue from bus transport in the United Kingdom

Revenue from bus transport in the United Kingdom provided by Abellio rose slightly from €216 million in 2017 to €219 million in 2018. This includes the replacement bus services that are provided by Abellio's train companies in the United Kingdom in the event of disruptions to the timetabled trains.

Revenue in Germany (€357 million in 2018, €246 million in 2017)

In Germany, Abellio recorded revenues that were €111 million higher than in 2017. Growth came mainly from the full consolidation of WestfalenBahn as of 6 December 2017 due to increasing the shareholding from 25% to 100% (an effect of €86.3 million). The remaining increase in the revenue was largely due to the start of the DISA and RRX franchises on 9 December 2018 (effect of €11.6 million) and organic growth.

Operating expenses

The operating expenses of NS rose by €661 million from €5,084 million in 2017 to €5,745 million in 2018. This was mainly due to higher personnel expenses (€133 million), higher costs for the infrastructure levy and franchise fees (€350 million) and increased 'other operating expenses' (€113 million). The increase was primarily due to the start of the new franchises in the United Kingdom and Germany.

Costs in the Netherlands fell by €32 million. If adjustments are made for exceptional income and expenditure, costs in the Netherlands were comparable to the level in 2017. Despite the influx of new trains and the wage increase of 2.3% based on the collective labour agreement, we were able to improve our result due to the increase in sales, a reduction in overhead and indirect costs, and productivity improvements in various processes. Now that the main performance indicators and customer satisfaction are up to standard, the operating result is being given a higher priority, although this is of course subject to the condition that the operational performance should not be affected so that we satisfy the franchise agreements made with the Ministry of Infrastructure and the Environment and meet our passengers' expectations.

| (in millions of euros) | 2018 | | 2017* | |
|---|--------------|-------------|--------------|-------------|
| | € | % | € | % |
| Wages, salaries and social security charges | 1,973 | 34 | 1,818 | 37 |
| Other personnel expenses | 82 | 1 | 69 | 1 |
| Staff hired in | 111 | 2 | 146 | 3 |
| Depreciation, amortisation and impairments | 361 | 7 | 369 | 7 |
| Use of raw materials, consumables and inventories | 527 | 10 | 505 | 10 |
| Own capitalised production | -154 | -3 | -161 | -3 |
| Subcontracted work and other external costs | 519 | 9 | 475 | 9 |
| Infrastructure levies and franchise fees | 1,280 | 22 | 930 | 18 |
| Other operating expenses | 1,046 | 18 | 933 | 18 |
| Total operating expenses | 5,745 | 100% | 5,084 | 100% |

* The 2017 figures have been adjusted to allow proper comparison

Wages and salaries

Wages, salaries and social security charges rose by €155 million from €1,818 million in 2017 to €1,973 million in 2018.

The increase in the Netherlands (adjusted for the sale in 2017 of Qbuzz) was 3%. This increase is primarily the result of the wage rise agreed in the collective labour agreement of 2.3% with effect on 1 October 2017 and 1 October 2018. We also faced a slight rise in the social security charges and supplements for irregular hours. The average number of FTEs of 18,734

was almost the same as in the previous year. The increase in wages and salaries in the Netherlands was offset to some extent by a decrease in the costs of hiring staff in, limiting the combined increase to 0.7%.

In the United Kingdom, wages and salaries increased by €142 million, an increase of 26% after allowing for exchange-rate effects. This is caused by the growth in the franchises. The average FTE count rose by 24.4% to 12,936 FTEs. The increase in wages and salaries and in FTEs is largely explained by the start of the West Midlands franchise in December 2017 (€156 million and an average FTE count of 2,430). The exchange-rate effect was €6.9 million and weakened the increase when expressed in euros.

In Germany, the rise in wages and salaries of 47.3% was caused by the start of the DISA and RRX franchises in December 2018 and the full consolidation of WestfalenBahn with effect from December 2017. The average number of FTEs rose by 49% to 1,657.

Infrastructure levies and franchise fees

The access charges for the rail infrastructure (infrastructure levy plus franchise fees) increased by a total of €350 million to €1,280 million. In the Netherlands, this item increased by 3.4% to €394 million (2017: €381 million). The costs were €741 million in the United Kingdom (€443 million in 2017). This increase was due to this being the first full year for the West Midlands franchise (€134 million) and to an increase in the infrastructure levy for the ScotRail franchise (€86 million). In Germany, the costs were €145 million (2017: €106 million). The increase of €39 million was due to the start of new franchises and the full consolidation of WestfalenBahn.

Other items

The other operating expenditure increased by €113 million in 2018, mainly because of higher costs for the lease of rail rolling stock at Abellio UK (€97 million) and Abellio Germany (€23 million) due to growth in the existing franchises and the start of new franchises.

Underlying result from operating activities

Our financial position and results need to be sound if we are to achieve our ambitions. Investments must produce sufficient returns to ensure the company's survival. This is also in the public interest. The development in the underlying result from operating activities is a good yardstick for assessing whether the company is able to achieve healthy returns on its business operations. The underlying result shows the result from operating activities after eliminating exceptional items.

| (in millions of euros) | 2018 | 2017 |
|---|------------|------------|
| Result from operating activities | 195 | 57 |
| Settlement of various claims | -4 | 14 |
| Impairment of stations and adjustments to depreciation and amortisation costs | 0 | 30 |
| CLE mechanism | 21 | -18 |
| Fine imposed by ACM | 0 | 41 |
| Miscellaneous | -7 | 7 |
| Underlying result from operating activities | 205 | 131 |
| *) Of which underlying result from foreign operations | 62 | 35 |

* The 2017 figures have been adjusted to allow proper comparison

The underlying operating result rose by €74 million in 2018 to €205 million (from €131 million in 2017). The CLE (Correction for Central London Employment) mechanism concerns our Greater Anglia franchise agreement with the Department of 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 this association does not exist, probably because commuter travel is changing in nature and working from home is becoming more popular. This means there is a risk that Greater Anglia, like other franchises in and around London, will have to pay more to the Department of Transport for an assumed substantial increase in passengers and sales without seeing an actual increase in the number of passengers or in revenue. Efforts are currently being made to resolve the CLE issue. The outcomes currently generated by the CLE mechanism will have a significant effect on the future profitability of Greater Anglia. An appeal has been lodged against the ACM fine recorded in the income statement for 2017. The fine was paid in 2017 and charged to the income statement in 2017. Given that the outcome of the appeal proceedings is uncertain and any receivables from the ACM as a result of the outcome of the appeal do not satisfy the IFRS criterion of 'virtually certain', NS has not recognised any associated receivables.

ROE

The return on equity (ROE) increased to 3.0% in 2018 (1.3% in 2017). The ROE based on the underlying result rose from 2.7% in 2017 to 4.0% in 2018. In the long term, NS aims to achieve a norm return on invested capital as agreed with its shareholder, the Ministry of Finance. That norm return in combination with a sound financial position will enable NS to independently obtain the financing it needs to make its investments through the market. The return on investment achieved in 2018 is still insufficient, and the financial outlook for the longer term remains challenging given the foreseen increase in fixed costs due to the influx of new rolling stock, and the possible consequences of Brexit and the discussions with the Department of Transport about the CLE risk-sharing mechanism for the results of our Greater Anglia franchise in the United Kingdom.

Net finance income

The net finance income was a negative amount of €14 million (negative amount of €5 million in 2017). A one-off income item was recognised in 2017 due to the release of the provision for a cross-border lease that was terminated at the start of 2018 (€8 million).

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 35.7%, compared to 9.6% in 2017. The tax burden in 2018 was €65 million (€5 million in 2017) and can be explained as follows.

| | 2018 | | 2017* | |
|--|------|--------|-------|-------|
| Profit before tax | 181 | | 52 | |
| Income tax based on Dutch tax rate (25%) | -45 | | -13 | |
| Effect of tax exemption for participating interests | 4 | | 8 | |
| Effect of transfer of rolling stock from Ireland to the Netherlands | | | -85 | |
| Effect of deviating tax rates in foreign jurisdictions | 4 | | 20 | |
| Effect of upward value adjustment to deferred tax assets due to increased future results for tax purposes in the Netherlands | | | 67 | |
| Effect of downward value adjustment to deferred taxes due to change in rate | -22 | | 5 | |
| Effect of non tax-deductible fine | -4 | | -10 | |
| Effect of adding mixed costs, investment tax allowance etc. | -2 | | 3 | |
| Income tax | -65 | -35.7% | -5 | -9.6% |

* The 2017 figures have been adjusted to allow proper comparison

In 2017 the ongoing issue of NS's lease activities in Ireland was settled. This had a substantial impact on the final income tax for 2017, due to the effect of transferring the rolling stock from Ireland to the Netherlands plus the revaluation of deferred taxes in connection with this transfer. Furthermore, the fine paid to the Netherlands Authority for Consumers and Markets (€41 million) is not tax-deductible for corporate income tax.

The downward value adjustment of deferred taxes in 2018 was made because of the plans to reduce the 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. The effect of deviating tax rates in foreign jurisdictions is due to our operations in the United Kingdom and Germany.

Other tax information

Payroll tax is a tax that NS, as the employer, withholds from the salaries of employees and then pays to the tax authorities. 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 tax 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 | | Income tax | |
|----------------|--------------|------|-------------|------|------------|------|
| | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 |
| Netherlands | -20 | 73 | -408 | -403 | 14 | -15 |
| United Kingdom | 254 | 186 | -205 | -124 | -11 | -1 |
| Ireland | 0 | 0 | 0 | -1 | -13 | -135 |
| Germany | 25 | 29 | -9 | -9 | -5 | 0 |
| Total | 259 | 288 | -622 | -537 | -15 | -151 |

Profit for the period and profit appropriation

A profit of €106 million was recorded in 2018. A proposal will be made to pay a dividend of €37 million, which is 35% of the profit for 2018, and to add the remaining €69 million to the reserves.

Equity and total assets

At the end of the year under review, equity was €3,627 million (€3,477 million at year-end 2017). The profit for the period of €106 million was credited to the equity. The return on equity was 3.0% in 2018 (1.3% in 2017). Solvency, at 52%, was slightly down on the previous year (56% in 2017) due to higher total assets. The total assets (€7,030 million) increased mainly due to investments in trains and the fact that the public transport student pass money for 2019 (€463 million) was paid in advance in December 2018 whereas the money for 2018 was only received in January 2018 (€448 million).

Investments

NS invested €898 million in 2018 (€618 million in 2017), for example in New Generation Sprinter trains including a follow-up order, New Generation Intercity trains, the overhaul and modernisation of the VIRM1 trains, and changes to maintenance centres to allow the maintenance of new rolling stock. NS made joint investments with ProRail in the stations of Assen, Rotterdam Alexander and Zaandam, among others. Investments were also made in IT systems for managing rolling stock and staff, and in customer systems, such as the journey planner, aimed at improving the door-to-door journey for passengers, and travelling on account for consumers, with the introduction of NS Flex.

Financing

The net cash flow from operating activities was €937 million (€10 million negative in 2017). This was caused mainly by higher operating profits and an increase in the working capital of €479 million (in 2017, this decreased by €222 million) because the advance for the student public transport pass at year-end 2018 was received in 2019, whereas the advance for 2018 was only received in January 2018. The acute tax liability (€101 million) in Ireland as a result of the transfer of the rolling stock to the Netherlands was paid in 2017.

The cash flow from investing activities was €654 million (€455 million in 2017). The cash flow included investment expenditure of €898 million. The sale of TRAXX locomotives resulted in an inflow of €185 million through a sale and leaseback arrangement that was agreed for the TRAXX locomotives. The sale of non-strategic property resulted in an inflow of €25 million.

The net cash inflow from financing activities was €65 million (an inflow of €296 million in 2017) due to the net drawdown of €73 million in 2018 under a number of loan agreements (€375 million in 2017). In addition, a dividend of €8 million was paid to the State in 2018 (€79 million in 2017).

This resulted in a cash inflow of €348 million during the year (cash outflow of €169 million in 2017).

Financial position

The robustness of NS's financial position is shown by the structure and the composition of its capital, and the available cash and cash equivalents including any committed credit facilities and off-balance sheet liabilities (mainly operating lease liabilities). Standard & Poor's (S&P), a leading agency that investigates the financial position of companies, has given NS Groep NV a credit rating of A+ with a negative outlook (based on an underlying credit profile of bbb+, currently raised by three levels in recognition of the relationship with the shareholder, the Dutch State). The negative outlook is because of the expected high levels of investment expenditure in the years ahead, which will cause the fixed costs to increase, making it a challenge for NS to achieve improvements in the financial results over the next few years. In view of the forecast growth in passenger numbers and the increasingly busy railways and stations, NS will be investing heavily in the coming years in trains, stations and ICT systems to make sure it can cope and continue to satisfy our 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 for the main rail network will be sufficient to let it carry out its investment programme of approximately €3.8 billion in the period through to 2023. The realisation of these improvement initiatives will require a substantial effort from everyone at NS over the next few years. Liabilities worth approximately €2.2 billion have also been entered into for lease equipment for the franchises in the United Kingdom and Germany.

Key financial figures

| | 2018 | 2017* |
|--|-------|-------|
| Concerning the capital position | | |
| Capital base/total assets | 52% | 56% |
| Current assets/current liabilities | 1.0 | 0.8 |
| Working capital (in millions of euros)* | -825 | -589 |
| Total assets (in millions of euros) | 7,030 | 6,214 |
| Concerning profitability | | |
| Profit for the period/average equity (ROE) | 3.0% | 1.3% |

* 2017 figures have been adjusted for comparison purposes)

** Working capital: current assets (excluding cash and cash equivalents) minus current liabilities (excluding loans and provisions)

2019 and beyond

We continue to focus on operational performance on the track after achieving a significant improvement in our most important KPIs, including customer satisfaction and punctuality on the main rail network. It is therefore important to maintain the high quality of our performance and improve it where possible, for example on the HSL South and at ScotRail. 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 passengers, for example with 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 the number of passengers.

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 cope with 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 profits over the next few years if NS is to remain able to finance all the foreseen 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 as leverage for further improvements in the result, alongside management of the overhead and indirect costs. What is more, Brexit and the discussions with the UK Department of Transport about the CLE settlement mechanism for our Greater Anglia franchise are factors introducing uncertainty in our expected results for the United Kingdom. Healthy financial management therefore requires our full attention.

Chrome-6/tROM

On Thursday, 31 January 2019 the RIVM presented the results of the hexavalent chromium investigation for the reintegration project tROM in Tilburg. Between 2004 and 2011 pensioners worked on, among other things, NS trains and museum trains for the Tilburg tROM project in the then workshop of NedTrain Tilburg. RIVM carried out an investigation, with which NS cooperated. An independent committee drew conclusions and formulated recommendations based on the research results. The committee drew some strong conclusions, including about the role of NS in the Tilburg project. According to the committee, the municipality of Tilburg, NS and the Dutch Railway Museum all cut corners. At the start of February 2019, the parties announced that they would be jointly making arrangements, each taking their share of the responsibility, with the aim of providing clarity to the people affected as soon as possible.

NS has made provisions for its share in the expected costs as at 31 December 2018.

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 is likely to be of this investigation.

IFRS 16: Leasing

As of 1 January 2019, all lease contracts must be accounted for in the balance sheet. The lease amounts are then replaced by depreciation costs and interest expenses. The application of the guideline is expected to expand the balance sheet by €1.8 billion from 2019 onwards. The operating profit for 2019 will be approximately €42 million higher and the pre-tax profit will be over €7 million lower due to increased interest expenses.

NS and taxes

Social responsibility

Taxes are the main source of income for governments. This income is used to fund general facilities. These general facilities are vitally important to NS. One example that could be taken is the rail infrastructure. NS believes it has a duty to deal with taxes in a socially responsible manner.

Guiding principles for the tax policy

Based on its duty to act in a socially responsible manner in tax matters, NS adopts the guiding principle that it should act in accordance with tax legislation and regulations, taking into account the purpose and spirit of the law. This means that it does not merely observe the letter of the tax law. A responsible approach to taxes 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 whose shares are entirely in the hands of 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. For example, when bidding for a competitive transport franchise, NS must be in a position to make an offer that is sufficiently attractive to be able to win the franchise when compared with the other market players. 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 and on the other hand 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 what is termed 'horizontal monitoring' of NS by the Tax and Customs Administration. The core concepts are trust, understanding and transparency. Based on this covenant, NS consults with the Dutch tax authorities on standpoints where there could be differences of interpretation. The aim is to be as up-to-date as possible so that NS has clarity at all times about its tax position. NS discusses matters with the Dutch tax authorities on a quarterly basis.

NS 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 a complete overview of tax matters at NS. The NS organisation is set up in such a way that all important decisions concerning tax matters are assessed by NS's tax department and that NS 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 advising on and coordinating tax matters. 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 via the local subsidiaries. The tax department reports to the NS Finance Director. The tax department regularly makes use of external tax consultants. This is done to obtain a second opinion on important tax issues, make use of specialist knowledge, improve understanding of new tax legislation and obtain assistance when setting up and modifying tax management

processes.

Abellio and NS Financial Services manage their local tax obligations via their financial departments, and hire in external consultants where necessary for tax compliance and country-specific tax issues. External consultants are called upon to assist 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, Abellio in Germany and NS Financial Services have a complete overview of tax affairs in the country in question and they ensure regular communication and coordination with the Executive Board and NS Tax department.

Acceptability of tax risks and risk management

NS aims to submit complete and correct tax returns on time and to pay the tax on time.

However, given the extent of its operations and the associated tax obligations, common tax risks inevitably arise in its processes. NS seeks to proactively identify and manage such risks. NS also monitors the presence, setup and functioning of the control processes in accordance with its policy and procedures in the area of risk management.

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'. This is also deemed appropriate given NS's duty to act responsibly in the matter of taxes.

NS documents the risks (including the tax risks) in a risk register, which is discussed regularly by the Executive Board. The control measures are also specified for each risk.

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 gives detailed information on deferred tax assets and liabilities.

About the lease activities

In the past, NS made a decision to run its lease activities through NS Financial Services in Ireland. Given that the Dutch main rail network franchise was granted to NS in a private tender, new trains for the main rail network have no longer been leased from Ireland since 2015. An agreement was also made to phase out the Irish lease portfolio for existing trains running on the main rail network. This process was completed ahead of schedule and the rolling stock was transferred from Ireland to the Dutch company.

Given that the commercial arguments for leasing trains in the Netherlands still apply, NS now has a Dutch lease company in the group that covers the trains in the main rail network. The Irish subsidiary is expected to cease its business activities in the course of 2019, after which this entity will be liquidated.

One element of the agreements with the Ministry of Finance is that new trains for bids that NS submits as of 2015 for regional lines in the Netherlands must be purchased through the Netherlands. Furthermore, it has been agreed with the shareholder that in the case of foreign operations, the guiding principle is that tax should be paid in the country of the franchise. Now that the Irish subsidiary has almost entirely been wound down, NS is operating in full accordance with these principles.

Our impact on the environment and on society



More than 1 million trips by train and bus every day mean that NS has a major impact on society in the Netherlands, in terms of mobility, safety, emissions and expenditure. We express the positive and negative environmental and socioeconomic effects on the wider community in euros in order to present a transparent picture of the breakdown and scale of this social impact.

Our impact in a nutshell

The diagram below shows the development compared to recent years and to the baseline year (2014). Passengers travelled over 250 million kilometres more by train in 2018 compared with 2017, which means that our positive social impact on mobility and safe travel with respect to cars has improved once again. The negative impact due to travel time has also increased as a result. A new element for NS in the calculations for 2018 is the positive social impact on health because rail passengers move more. Our impact on the environment has improved because we no longer run diesel trains and we sold the bus company Qbuzz last year. The positive impact of expenditure and education was less because NS had a smaller 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 2017 | % w.r.t. 2017 | % w.r.t. 2016 | Impact compared with cars | % w.r.t. 2017 | % w.r.t. 2016 |
|---------------------|----------------|---------------|---------------|---------------------------|---------------|---------------|
| | | | | | | |
| mobility | € 7,776 | 2% | 9% | | n/a | |
| expenditure | € 1,375 | -3% | 10% | | n/a | |
| training | € 12 | -12% | 25% | | n/a | |
| journey time | € -5,727 | 2% | 11% | | n/a | |
| environment | € -72 | -17% | -50% | € 291 | 3% | 25% |
| health and safety | € -131 | n/a | n/a | € 620 | 4% | 13% |

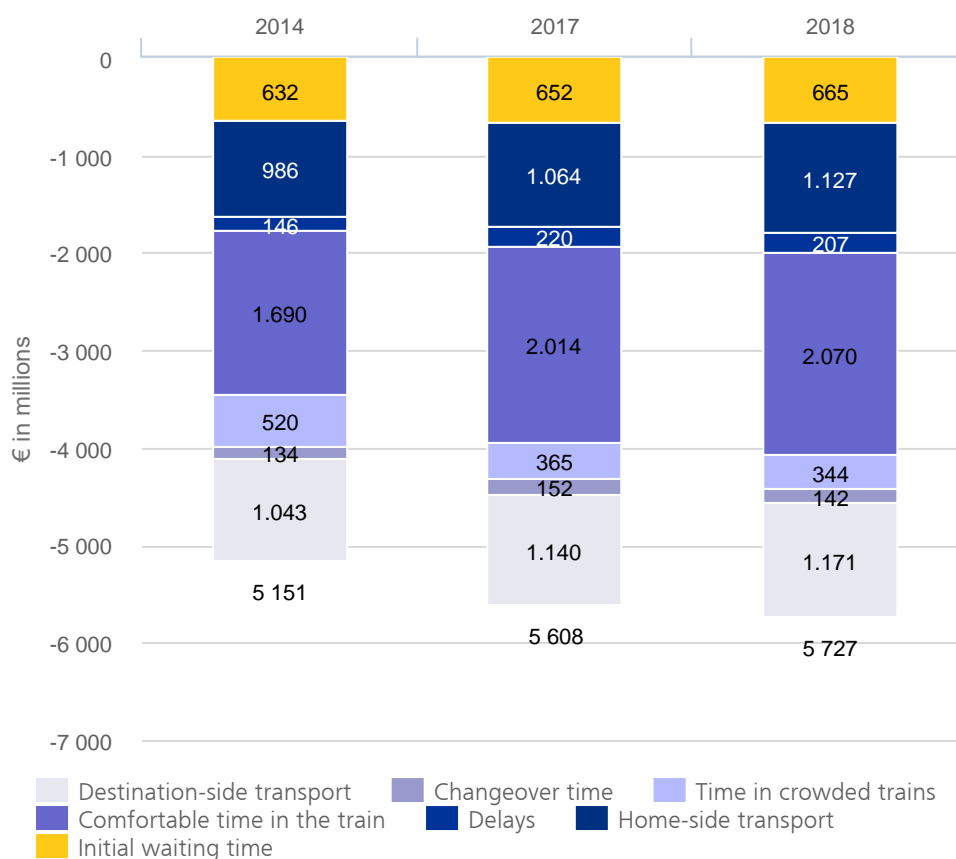
Results in 2018

Socioeconomic impact of mobility and journey time

NS and the sector partners are creating a socioeconomic 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. €7,776 million of that can be ascribed to NS (€7,652 million in 2017).

The travelling time for the door-to-door journey results in social costs because passengers are not able to utilise their time as they would like. This applies above all to time lost to delays and to time spent in overcrowded trains (for example due to a lack of seating). The negative impact of travelling was €5,727 million in 2018 (€5,608 million in 2017, following a recalculation). The increase in the negative impact was due to the fact that there were more train journeys. The impact of time spent travelling in crowded trains has improved substantially thanks to measures taken to deal with overcrowding, such as the deployment of more rolling stock. 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 shortened, and time in the train must be spent efficiently and comfortably.

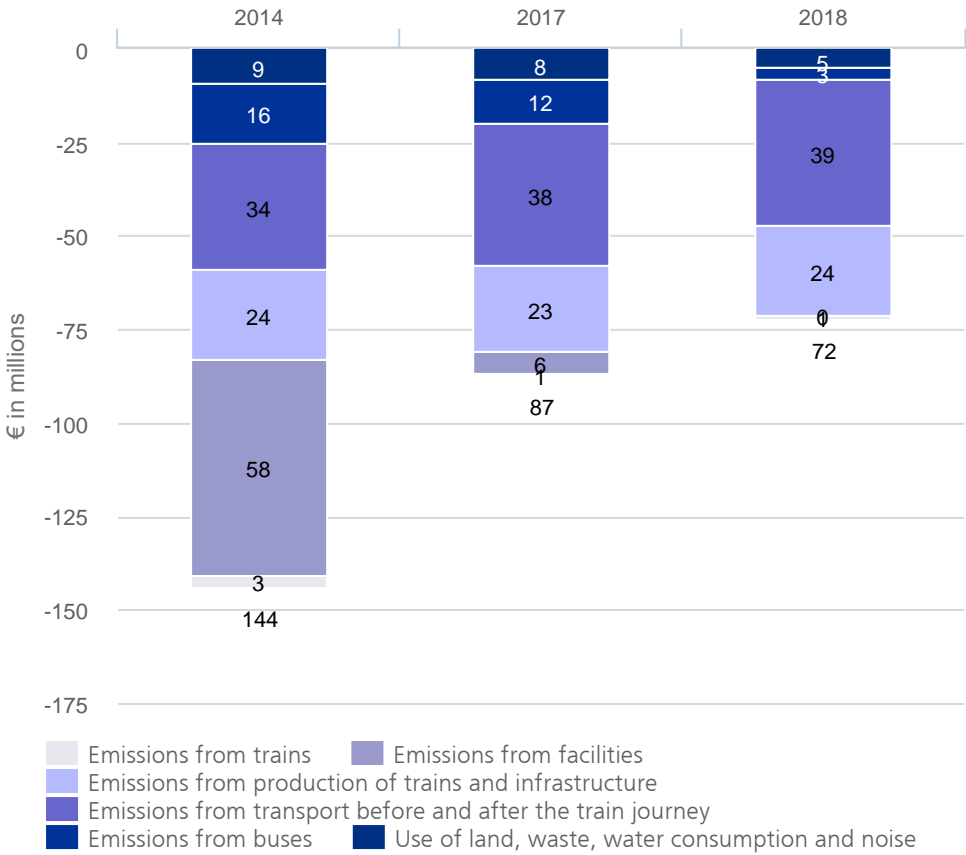
Journey time



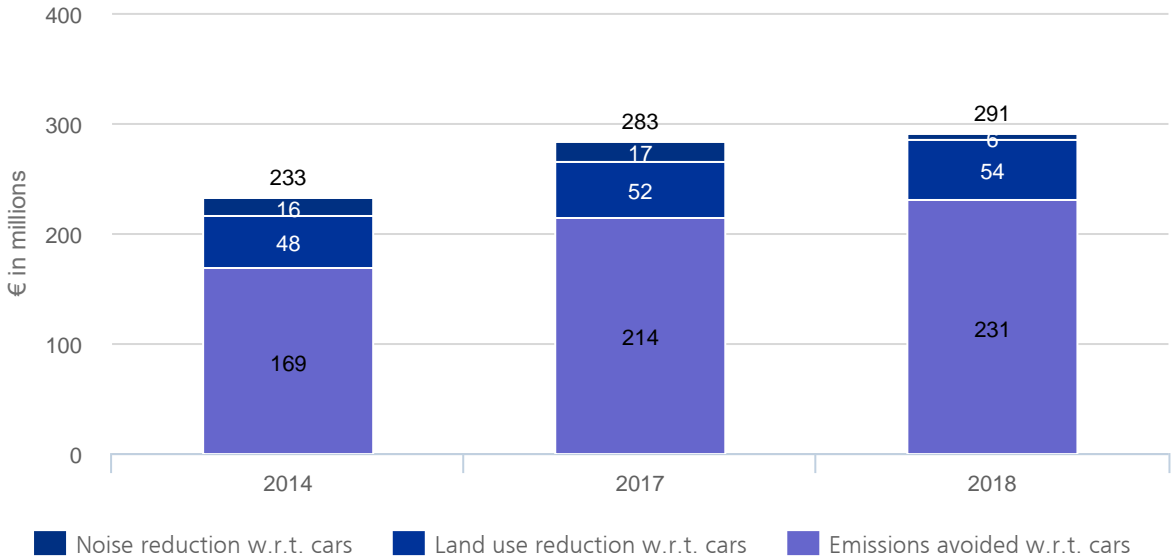
Environmental impact: emissions, land use, waste, water and noise

The negative environmental impact is the result of using fossil fuels, among other things. The use of fossil fuels causes air pollution through emissions of e.g. CO₂, SO₂, NO_x and fine particulates. This has a negative impact on climate, nature and health, resulting in social costs. The use of 100% green power for trains and buildings has considerably reduced this impact over the past few years. This negative impact has been halved compared with 2014. Land use, waste, water consumption and noise nuisance also result in negative environmental impacts. Compared with cars, trains have a positive environmental impact. Travelling by train avoids some air pollution because pollution produced by the train – along with the public transport bicycle – is low compared to car journeys and alternatives for transport to and from the station. The positive impact on noise and land use compared with the car concerns 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 the car for 'elective passengers', i.e. those who are willing and able to make a choice between the car and the train.

Negative environmental impact



Positive impact with respect to cars



Our negative environmental impact improved by €15 million in 2018, mainly because we no longer run diesel trains and we sold bus company Qbuzz. The positive environmental impact of travel with NS compared to using the car rose to €291 million as a result. The current negative environmental impact was about €72 million (€87 million in 2017, following recalculation), broken down into about €9 million as a direct consequence of NS and about €63 million in the transport sector as a whole including transport to and from the station, the manufacture of the trains, plus electricity and infrastructure.



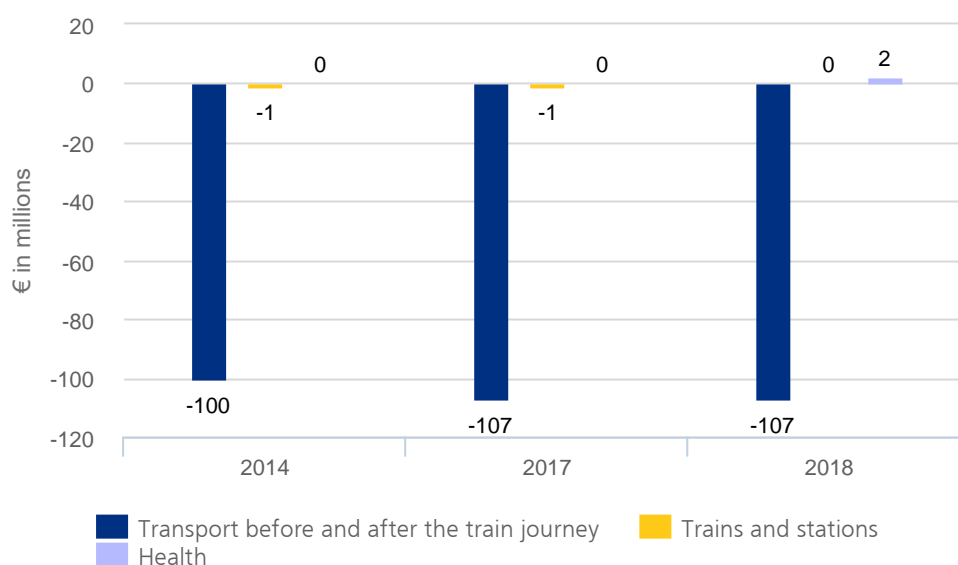
Socioeconomic impact of safety

We can promote safety within society by offering safe transport and a safe environment for passengers and staff. At NS, we are working on occupational safety, personal safety and safe travel. This year the social costs for occupational safety and personal safety were calculated using a different calculation method. This new calculation ensures a higher degree of accuracy when calculating the social costs of accidents at work. Comparison to previous years is no longer possible because there is no data available for recalculations.

The social costs of occupational safety in 2018 were €15 million. In terms of the occupational safety of our staff, NS is working on preventing physical or mental harm to our employees, for instance as a result of unsafe working conditions, which can mean they are unable to work (or not able to work full-time) or may need care. NS took further steps in 2018 to encourage staff to report unsafe situations and to reduce unsafe working conditions, for instance through sound risk assessment and evaluation reports.

Over recent years we have taken various measures in terms of personal safety, such as the use of cameras, body cams and security staff at stations where passengers feel unsafe. We cooperate closely with the police, municipalities and other carriers. We made agreements with our partners to carry out actions together to increase the level of safety. This has improved customer satisfaction for personal safety. The social impact of personal safety was around €10 million in 2018.

Safe journey



To provide safe travel, NS is working with its partners on preventing collisions and derailments and unsafe situations at the stations. The social costs were €0.5 million in 2018, down on 2017. The number of traffic accidents in journeys to and from the station and the impact of these accidents was much higher; the figure of approximately €107 million is comparable to 2017. Travelling by 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 the 'elective passengers'. The social benefits of safe transport by train were approximately €620 million in 2018 (€593 million in 2017).

Socioeconomic impact on health through a more active lifestyle

We have a socioeconomic impact on society because passengers who use our services also become more active. We calculated this impact for the first time. 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. This positive impact was about €2 million in 2018.

Socioeconomic impact of training, employability of staff and diversity

We exert a positive socioeconomic impact on society by developing the knowledge, skills and talents of our staff, by aiming to keep them in sustained employment, and by being a diverse and inclusive organisation.

The social benefit of training at NS comes from the improvement in the economic value of the potential capacity of its workforce after they have left NS. The social benefits of this in 2018 were approximately €12 million, which is less than the previous year (€14 million) because the number of NS staff in the Netherlands has fallen.

Incapacity for work limits the employability of employees. This has negative social costs, for example because of higher medical costs and costs of benefit payments, and the loss of productivity and purchasing power. NS wants to improve that impact.

We want to be a diverse and inclusive organisation where everyone feels welcome. Diversity produces social role models and recognition for e.g. women, people with occupational disabilities and people from migrant communities. In addition, diversity ensures that NS is more aware of what is happening within society, which lets us adjust our policy to suit.

Socioeconomic impact of expenditure

We have a socioeconomic impact on society 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 €1,375 million of added value at suppliers (€1,413 million in 2017), i.e. approximately 21,300 jobs.

We are able to extend our positive social impact yet further through sustainable procurement, e.g. for major categories of purchases such as trains (and their components), buildings and infrastructure, IT and energy.

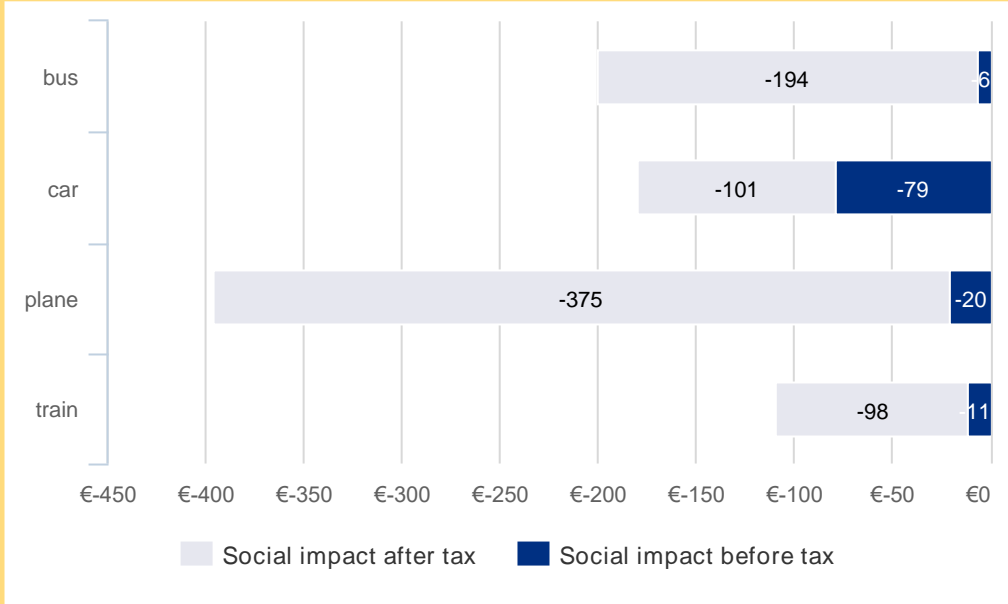
In addition, we have an impact on the areas surrounding our stations. This consists primarily of enhancing accessibility for local residents (seen in journey times and mobility) and the contribution to improving the living environment, for example through commercial activity around stations.

Case study: Social impact of international mobility between Amsterdam and Paris

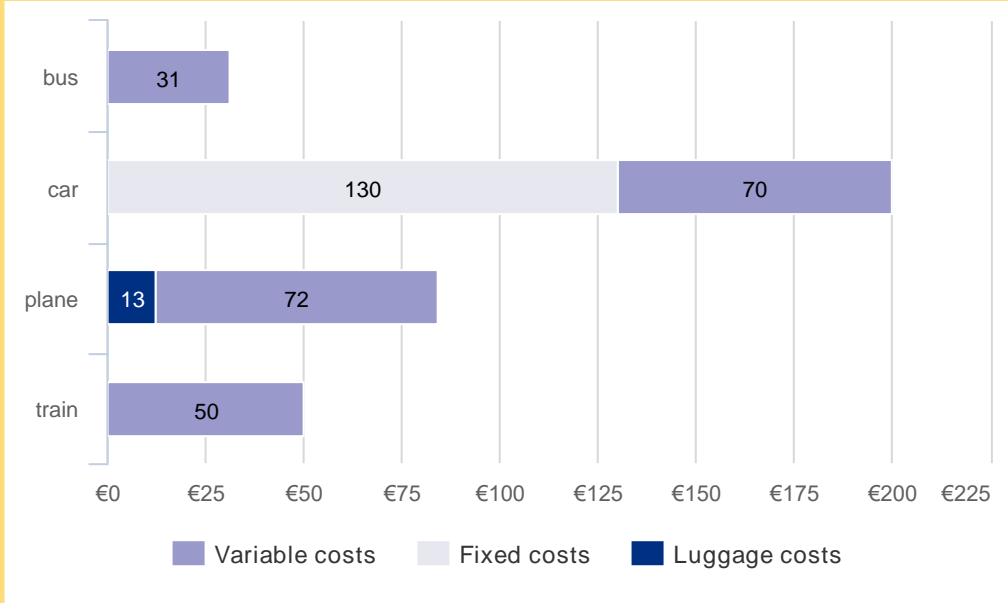
Every year several million people travel from the Netherlands to Paris, usually by car (over 40%) but also by train, bus or plane (respectively 28%, 15% and 14%). Although everyone has personal preferences, passengers will largely base their choice of transport on the total fare, the journey time and the comfort of the journey.

Although passengers may not explicitly include social considerations in their choice, they are there. Think of the costs of environmental pollution, traffic accidents or maintaining the infrastructure, for example. There are also social benefits, for example taxes that are paid by the passenger.

Social impact per modality of Amsterdam-Paris



Average total fare (including pre-and post-transport) *



* The impact of a trip from Amsterdam to Paris is determined by more than just the price of the trip. This impact differs when taking the train, car, plane or bus.



The impact per passenger is given for one single trip from Amsterdam (Museumplein) to Paris (Eiffel Tower).

We calculated the social impact score of the various modes of transport to gain insight into the playing field for all carriers. The car is currently the most popular means of transport. This could possibly be explained by the relatively low variable costs (fuel and toll) for motorists. Only these costs are actually experienced by motorists. This 'experienced' trip price is highest for the train, which is 20 euros more expensive than the car. The fixed costs that motorists pay, such as road tax and insurance, actually make the car the most expensive. The fixed costs make up 65% of the total fare when travelling by car.

The plane has the lowest social value because the journey time spent in planes is uncomfortable and only part of the journey can be spent usefully. Journey time is the most important contribution to the social value. For the plane and bus this aspect even determines more than 90% of the total value. Although the bus is the cheapest mode of transport, the social value is low due to the long journey time. The train has the best social value, especially because the time in the train is valued the highest. The relatively high taxes (such as the motor vehicle tax) mean that the social value of the car is not much more negative. The train scores by far the best on environmental and safety costs. These aspects have limited influence on the social value but do ensure that in the end the train beats the car, bus and plane.

Our aim is to have fast train connections to all the major cities within a radius of 700 kilometres. We are actively advocating a European agenda for the railways. In 2018, we put a fast connection between Amsterdam and Berlin on the agenda. We would like to work this out in more detail in 2019 with Deutsche Bahn and the public authorities. The connection between Amsterdam and London will be expanded this year in any event from two to three trains a day.

NS as an employer in the Netherlands



NS is one of the biggest employers in the Netherlands and is a strong brand in the labour market. Every day, our nearly 22,000 employees enable people's door-to-door journeys in the Netherlands. We welcomed almost 5,000 new colleagues in 2018, either starting permanent jobs, or temporary assignments or part-time jobs alongside their study or other work. Sufficiently 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 the end of 2018, the NS workforce comprised 21,011 staff (18,381 FTEs)
- 84% of all NS staff had permanent contracts (81% in 2017) (male/female ratio: 71/29) and 19% have temporary contracts (male/female ratio: 46/56)
- Of NS's workforce, 67% were full-time employees (male/female ratio: 83/17) and 33% were part-time employees (male/female ratio: 36/64)
- Women made up 33% of the workforce at NS (2017: 34%)
- The average age of our employees was 44 (2017: 43)
- In 2018 NS had a flexible layer with hired personnel of about 7% of the workforce.

Recruitment

The labour market is becoming tighter and tighter. The number of job vacancies is increasing, unemployment is falling, the population is ageing and there is a decline in the number of young people. NS is seeing the effects of this in its recruitment in a number of regions and in crucial professional areas such as technology, IT, service and retail. It is important to remain an attractive employer in the Netherlands. We respond to this challenge by showing NS as an employer from different perspectives. In our labour market campaigns we emphasize the wide range of opportunities that employees have at NS to improve mobility in the Netherlands. We also use a variety of recruitment channels tailored to suit the target groups and involve our own staff to help find new colleagues.

NS recruits between 3,500 and 5,000 new members of staff every year, more than half of whom work in the station retail outlets. In 2018, we filled 3,555 vacancies for people with vocational qualifications and 746 vacancies for graduates of applied and academic universities (2017: 3,779 and 1,011 respectively). 140 chief guards and 60 Safety & Service staff were hired. 19 trainees started with us. In our recruitment, we paid more attention in 2018 to the positioning of NS as an attractive employer where employees get a lot of freedom and have a socially relevant impact on the Netherlands. We show the challenges NS is working on and how employees can contribute.

The recruitment is done online and focuses on specific groups through the new campaign 'Tomorrow's journey starts with you'. There is a new website, werkenbijns.nl, and we work with a new recruitment system that makes it easier for candidates to find information and respond. For each target group we examined what aspects of work are most important to them, and we give specific attention to that in the campaign.

The hiring desk filled 369 temporary positions and we have concluded new contracts with employment agencies. All new employees were screened and completed online modules to familiarise themselves with NS.

Diversity and inclusiveness

NS wants to be seen as an attractive employer where everyone can feel at home. This can be done by making the workforce and management reflect the composition of society at large, therefore letting NS ensure it is a diverse and inclusive 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 2018, women comprised 35% of the senior management at NS (2017: 32%). As in 2017, 33% of the members of the Supervisory Board were female and the Executive Board had two female members (40%).

People with occupational disabilities

In the past year, 51 people with occupational disabilities started work in the retail companies as hospitality or retail assistants. In 2018, a total of 82 people had a 'social responsibility' job, created at NS for people with occupational disabilities (71 in 2017). In 2018 various people with vocational and applied-university-level skills joined the organisation in 'social responsibility' jobs. We aim to have created 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 use people for NS work who are at a disadvantage in the normal labour market or who have occupational disabilities. In this way, we want to contribute together with our suppliers to social objectives for people who are at a disadvantage in the labour market. We are imposing this obligation in a number of ongoing contractual agreements and invitations to tender. This was done, among other things, in contracts for the management of bicycle storage facilities and the deployment of temporary staff.

Employees from migrant communities

NS wants to have more staff from migrant communities in managerial positions and in the higher salary scales. We do this by influencing and increasing the choice of managers in the selection process and by doing more to focus on specific groups in our recruitment. We are also working with a diverse recruitment team. In addition, we started an internal programme to create a more inclusive working environment with special attention for cultural differences. Former refugees 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. In 2018 we organized introductory meetings for the retail companies together with the organisations that help refugees find work. NS regularly shares what it has learned and its experiences with other employers, organisations and municipalities.

Learning at NS

We continually need to learn new approaches and new knowledge in order to be able to guarantee good operational and financial performance in the future. Changing and learning go hand in hand. The NS vision on 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 prioritising this vision, with the aim of accelerating the application of new knowledge and skills. In 2018 NS invested over €25 million in training courses and other educational activities. In total NS staff had 57,725 training days and completed 129,569 e-learning modules. Moreover, 164 training programmes were created or improved.

Lifelong learning

We also pay constant attention to lifelong learning. Employees get professional information in their work via apps, practical guidance and mentoring. Mechanics, drivers and conductors 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 with 8,695 different forms of learning, including the use of simulators, e-learning, apps, skills sheets and classroom learning methods.

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.

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. About 300 drivers, chief guards and Safety & Service staff successfully completed their basic training last year.

In order to be able to work on the New Generation Sprinter trains (SNG) 750 drivers and 1,750 chief guards followed a training programme for these trains. We equipped all drivers with a tablet with the *Mijn Vakmanschap* ('My professional expertise') app so that professional information and rolling stock knowledge is always available up-to-date.

Safety and privacy

To guarantee knowledge and awareness of safety, 3,956 employees completed an online module on the new NS safety management system. The module is important for every employee who is involved with railway safety in their daily work and mandatory for every employee working with the safety management system.

We prepared NS employees for the General Data Protection Regulation (GDPR), which became effective in 2018. 12,788 of them completed the online learning modules on this topic.

Rolling stock technology and TechniekFabriek

In anticipation of the introduction of new trains we trained close to 800 mechanics in 2018 for maintenance of the rolling stock. What is more, last year 263 of our mechanics participated in vocational training that was tailored to fit in with their work experience. This allows them to complete the training relatively quickly.

At the end of 2018, 102 students were following a two-year apprenticeship in Mechatronics at TechniekFabriek (the 'technology factory'), the place where NS provides technological training in the form of an intensive vocational programme for current and future train mechanics.

Earlier, in September, 43 trainees from TechniekFabriek moved on to a job at NS.

Other matters

NS is committed to multiple forms of learning. When developing new training programmes, the emphasis is on informal learning and learning on the job. Examples are providing supporting professional information via mobile apps, e-learning, workplace assignments or the train simulator. We also make use of the in-house expertise of colleagues: employees with experience in the area of team coaching, peer advice or facilitation assisted over 200 employees and more than 100 teams last year. Employees have access to a wide range of training options via the online NS Learning Portal, where they can also view their learning plan and qualifications.

Moving jobs

If organisational developments have consequences for staff, NS ensures employees receive assistance from an early stage in finding new work within or outside NS. We do this to prevent redundancies among employees. In 2018, the majority of the redundant employees found new suitable jobs within the period during which they received assistance.

NS not only assists staff in reintegration, redundancy and outplacement, it also explicitly works on promoting employability. In 2018, over 300 employees made use of the help and advice offered by the Careers Advice department at their own initiative. A total of about 600 employees received assistance.

NS is also encouraging mobility, for example by organising 'orientation days' and 'development positions' for staff tied to shift schedules. On orientation days, employees can learn about what their work colleagues in different disciplines do. 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

For the employee participation bodies, 2018 was all about the elections for the works councils and 'subcommittees'. The turnout was high; over 60% of the employees cast a vote. The members of the employee participation bodies were chosen for the period 2018 to 2021. In 2018, NS together with the employee participation bodies and the trade unions set up informal thematic discussion bodies on eight themes that are important for the future of NS. In these thematic discussion bodies, ideas were collected on such topics as the NS mission and vision, work in the future and finances.

Staff engagement

The biennial employee engagement survey was held in 2018. The survey had a response of 66% (over 14,000 participants). The satisfaction score for work in the employee's business unit increased from 7.6 to 7.7. Satisfaction with work at NS grew from 7.3 to 7.5. For the first time, three questions about diversity were asked in this survey. Employees feel that they can be themselves at work and feel accepted at work (both scored a 4.1 on a scale of 1 to 5). The opinion on equal opportunities at work scored lower: 3.6. Although this score is comfortable enough, we will investigate the potential for improvement in 2019.

Sickness absence

The sickness absence rate at NS was 6.0% in 2018 (5.7% in 2017). Sickness absence among chief guards is systematically high, in part because of the ageing profile of this group. In 2017, an investigation was carried out into the workload of the chief guard's job, the results of which will be published in 2019. NS also wants to work on increasing the employability in cooperation with staff. We are doing this in part by offering preventive interventions that help them maintain their health, whereby staff can decide themselves what is important to help them remain employable.

Individual budget

As of 2018, all NS employees receive an individual budget totalling 750 euros (gross) for three years. They can use this money for facilities and activities that fit their personal wishes in the fields of vitality, career, development or finances. The money could for instance be used to finance gym membership or a training course.

Organisational improvements



To be able to deliver good services, NS is aiming to develop into a decisive and results-oriented organisation with effective leadership. We attach great value to operating in accordance with the agreed norms and values.

Culture and conduct

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. In 2018 NS organised a programme focusing on reinforcing a culture of openness and taking responsibility in which dilemmas are discussed, risks weighed up and choices made on the basis of the right information and in which we learn from our mistakes. We use a method that ensures that staff make choices about integrity and conduct, with proper understanding and enthusiasm and from an intrinsic conviction. The aim is to have lasting safeguards ensuring desired behaviour and integrity within NS. Sessions on integrity and compliance take place across the organisation to increase awareness. Attention is paid to the specific context in which teams operate. Employees also complete e-learning modules to enhance knowledge of compliance themes (competition, information security and privacy). In addition, a toolkit with a variety of working methods helps managers and their teams introduce improvements.

NS Code of Conduct

NS has 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. The NS Code of Conduct is in line with the OECD guidelines and serves as a guide for employees when weighing up options and making carefully considered choices in diverse and sometimes tricky situations. NS draws the attention of its staff to the Code of Conduct and working ethically in various ways, such as an e-learning tool and a game in which staff can discuss dilemmas in their work with one another or as a team. Furthermore, the NS Code of Conduct forms a basis for handling reports relating to integrity and investigations into integrity.

Integrity and compliance

NS aims to comply systematically and permanently, demonstrably and credibly with the legislation and regulations that are appropriate for a company of NS's social standing and responsibilities. That is why we made the Integrity & Compliance function yet more professional in 2018. The process for reporting and handling potential integrity issues has been revised and we established an NS-wide policy framework for compliance. More than 230 sessions on integrity have been held in the organisation.

NS has the ambition to elevate integrity and compliance to a structurally higher level. In order to achieve a proactive organisation in the context of an open and safe culture, it is necessary that integrity and compliance are an integral part of the business operations. We carry out measurements of this every year. These show that NS made progress in 2018 in risk awareness and in signalling and handling integrity issues. The actions that we originally initiated, such as the sessions, are now being followed up.

Integrity & Compliance department

The Integrity & Compliance (I&C) department focuses on encouraging desired behaviour and correct observance of legislation and regulations within NS. The department develops policy, provides information on that policy, handles and investigates integrity reports, provides solicited and unsolicited advice, fulfils the role of compliance officer and promotes integrity awareness within NS. Themes which I&C focuses on include forms of conduct, conflicts of interests, protection of information, fraud, anti-corruption and competition.

The department reports to the Chief Governance, Risk & Compliance Officer, 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 within NS about developments, trends and signs regarding reports and queries about integrity.

Integrity portal

The Integrity Portal on the intranet provides employees with information on the NS integrity and compliance policy and gives them the opportunity to report integrity issues, submit questions and dilemmas and find contact persons. Tools and learning aids about integrity and compliance are also available here for staff and managers. The information in the Integrity Portal is constantly being amended and added to in response to the latest developments. Every month, employees receive a themed bulletin with concise information on a specific topic, such as communication and conduct, conflicts of interest and intimidation.

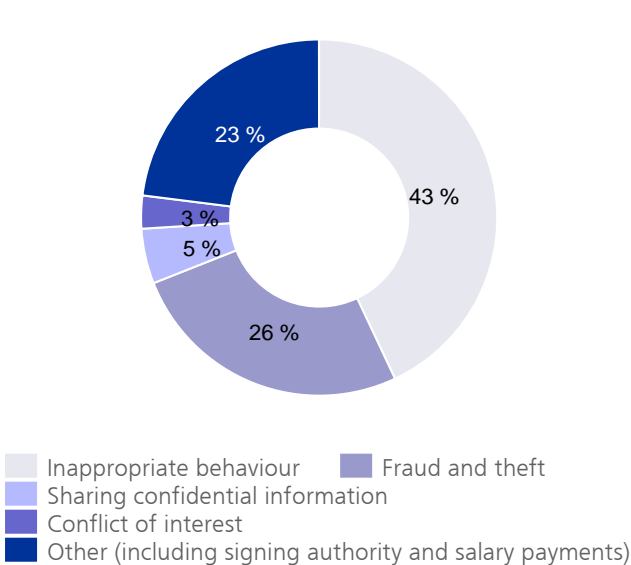
Integrity Desk and Scheme for Reporting Integrity Issues

Staff have several options for (anonymously) reporting integrity issues or abuses: by e-mail, by phone, in a one-on-one conversation or via the Integrity Desk on the Integrity Portal. The Scheme for Reporting Integrity Issues (including 'whistle-blower' reporting) guarantees that employees can report irregularities or suspicions of irregularities, that these reports will be dealt with carefully and confidentially and that the employee will not experience any adverse consequences of having reported the incident. If there is an irregularity or a suspicion of an irregularity, a manager can directly submit a request for an investigation into the circumstances.

All reports and requests for such an investigation are handled according to the NS Scheme For Reporting Integrity Issues. A report may also lead to a decision to conduct an investigation into the circumstances. This investigation focuses on establishing the truth. Such investigations into the circumstances take place in accordance with the investigation protocol for the Scheme For Reporting Integrity Issues. An investigation may result in measures to be implemented with regard to the organisation, processes and/or corporate culture. Another possible result can be that disciplinary measures are taken against the employees involved or that the relationship with suppliers and other partners is revised or ended. If there are suspicions of criminal misconduct, a case can be handed over to the police and the judicial authorities.

In 2018 a total of 101 cases were received and handled. Another 143 questions and dilemmas were submitted to I&C in 2018. The topics can be broken down as follows:

Overview of integrity cases 2018



| Topic | Cases | Questions |
|---|------------|------------|
| Inappropriate behaviour | 49 | 32 |
| Fraud and theft | 29 | 0 |
| Sharing confidential information | 5 | 21 |
| Conflict of interests | 3 | 62 |
| Other (including signing authority and salary payments) | 15 | 28 |
| Total | 101 | 143 |

Given the increasing attention to Integrity & Compliance within the organisation, it is expected that the number of reports and questions will increase in 2019.



Confidential advisers

In the event of inappropriate behaviour, employees can call on one of the confidential advisers at NS. The confidential adviser can offer support, give advice and assist with taking steps to stop or change inappropriate behaviour. Or they can lend a willing ear. In 2018 employees called on a confidential adviser more than 160 times.

Compliance

Of course NS wants to comply with applicable laws and legislation. That is part of the Integrity theme. Facilitating and supervising ethical conduct is important. The NS Code of Conduct plays an important part here. There are also dedicated compliance programmes that focus on legislation and regulations, such as the Railways Act, the Competition Act and legislation with respect to the protection of privacy.

Leadership at NS

In 2018 we set up a new profile for managers based on the new mission and vision of NS. Four qualities are important for managers within NS:

- cooperating on an integrated basis while giving top priority to the interests of passengers
- achieving ambitious objectives
- leading the change
- being an example for others

In 2019 we will further shape the development of our managers based on this profile. In 2018, we continued to pay as much attention as ever to promoting the current managers and preparing the managers of the future. We have a clear idea of the successors in both the longer and the shorter term for the 190 key positions. In 2018, 74% of appointments to key positions were based on the internal succession plan.

Leadership development

We offer customised support and in-company leadership programmes to employees who have the potential to advance to a management position. The third edition of the Navigator leadership programme (successors for top-50 jobs) ran throughout the year. On 14 December the 14 participants, from NS and Abellio, presented their recommendations on how leadership can boost the improvement of NS's financial performance. Furthermore, the CAP programme for a group of candidates for management positions came to an end. 25% of the participants took a follow-up step during or shortly after finishing the programme. A new group of 17 candidates has now started the programme; they are defining the steps they need to take as managers.

In 2018, 22 trainees took part in the trainee programmes for operational management, IT, technology and finance.

Care for the privacy of our passengers and staff

The General Data Protection Regulation (GDPR) came into effect on 25 May 2018. To prepare for this, NS commissioned an external agency to perform a scan. The scan identified areas for improvement in order to be compliant with the regulation. For example, we developed work packages that were implemented across the entire organisation. NS also paid a lot of attention to education and awareness, for instance with mandatory e-learning. To guarantee that NS remains compliant with the privacy regulation a new privacy structure and governance was set up.

For NS, the privacy of passengers and staff is more than just a mandatory regulation. We

defined four principles that take priority when processing personal data: 'Transparent', 'Safe with NS', 'Choice and control' and 'Innovative and open'.

At the end of 2018 the GDPR programme was terminated, and the remaining points from the programme were transferred to the business units. The Integrity and Compliance department monitors how they implement these points.

Occupational safety

Where the safety and health of our staff is concerned, our aim is that accidents are prevented and that everyone should come home from work just as healthy as when they started work, both physically and mentally. In 2018, NS carried out a risk assessment and evaluation (RAE). This identified all potential safety risks concerning occupational safety. We include the points requiring attention in an action plan to find solutions for them.

KPMG carried out a safety culture assessment throughout NS. We have developed a monitoring dashboard based on the results, which we can use to monitor safety processes. This way, we can determine whether we are compliant and have achieved the desired safety objectives. NS is doing this to have a better grip on the safety processes and to have a positive effect on the safety culture.

Involvement of the Executive Board and management

The Executive Board and management are responsible for health and safety of employees. That is why they are intensely involved with the occupational safety policy. The Executive Board talks to individual staff about their personal health and safety in their own working environments during planned 'safety walks'. Furthermore, the central works council has agreed to the NS working conditions policy; the risk assessment and evaluation structure has been aligned accordingly. Legislative amendments due to the new Working Conditions Act were realised before the mandatory date of 1 July 2018.

Chromium-6

On Thursday, 31 January 2019 the RIVM presented the results of the hexavalent chromium investigation for the reintegration project tROM in Tilburg. In the Tilburg tROM project, people on unemployment benefit worked between 2004 and 2012 on trains belonging to NS and the Dutch Railway Museum at the then NedTrain workshop in Tilburg. RIVM carried out an investigation, with which NS cooperated. An independent committee drew conclusions and formulated recommendations based on the research results. The committee drew some strong conclusions, including about the role of NS in the Tilburg project. According to the committee, the municipality of Tilburg, NS and the Dutch Railway Museum all cut corners. At the start of February 2019, the parties announced that they would be jointly making arrangements, each taking their share of the responsibility, with the aim of providing clarity to the people affected as soon as possible.

Last year, we took various steps for improvement in the chromium-6 and hazardous materials programmes. In 2018 the chromium-6 programme was 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 health & safety and environmental legislation. More information on chromium-6 can be found [here](#).

Physical accidents

In order to improve accident monitoring and implementation of the occupational health and safety policy, NS switched to reporting the Total Recordable Rate (TRR) for physical accidents. The TRR was 5.3 (5.0 in 2017). This concerns accidents resulting in sickness absence (including those accidents where it was possible to find replacement work) expressed in numbers per million hours worked. Accidents as a result of aggression are not included.

Legal aftermath of the public transport tender in Limburg and ACM's fine

On 22 May 2017, the Netherlands Authority for Consumers and Markets (ACM) concluded that NS had violated the Competition Act and fined NS €40,950,000. NS disagrees with the ruling and the supporting arguments for the decision. The objection that NS filed against the ruling was rejected by the ACM. NS has filed an appeal against this at the Court of Rotterdam.

Investigation by the Public Prosecution Service

The Public Prosecution Service (specifically, the Office for Financial, Economic and Environmental Offences in 's-Hertogenbosch) started an investigation in 2015 into possible criminal acts in connection with the tendering process for public transport in Limburg, and 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 was charged and ruled that the Public Prosecution Service was not allowed to prosecute in the case of a third offence with which NS was charged. This ruling was also made in the cases against the other parties involved, insofar as they were charged with the same offences. The Public Prosecution Service has appealed against the ruling on 21 December 2017. It is still not known when the appeal will be dealt with by the Court of Appeal.

Dialogue with our stakeholders



In addition to daily contact with passengers, NS maintains close relations with a wide variety of 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 contacts 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 has 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 NS.

Our stakeholders

We see our stakeholders as the people or groups who are affected by our actions and who have an effect on our organisation and services. NS is continuously monitoring who its stakeholders are. There can also be stakeholders who are on the scene temporarily for specific subjects – their input can be relevant and we therefore take them seriously.

The nature of our contacts with stakeholders is determined in some cases by legislation (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). The Council for Sustainable Business discusses who the current and new stakeholders are every two years. The results are then presented to the Executive Board. In the intervening year, we organise dialogues with our stakeholders so that we can hear directly from them what they think of the course NS is taking. These dialogues took place in 2018 too.

Stakeholder management

NS is continually talking to the main stakeholders: organisations representing passengers and consumers, ProRail, provincial authorities, municipalities, franchise authorities, the shareholder, staff, the 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 we take, 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 in the organisation, with the Executive Board often being involved. This allows us to build up trust.

Working visits by stakeholders

Various stakeholders paid NS working visits in the past year. 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. For example, new members of the Dutch parliament visited HSL South and travelled on the InterCity Direct train so that they could experience the train service, infrastructure and security systems first-hand with the drivers.

Representatives of the political parties also took a look behind the scenes at the refurbishment workshop in Haarlem and the NS training centre TechniekFabriek, and they did a shift with chief guards in the Safety & Service teams. State Secretary Van Veldhoven (Infrastructure and Water Management) paid an introductory visit to the railways in November. The State Secretary visited the renovated Utrecht Centraal station and rode on one of the 'ten-minute trains' (high-frequency service) from Eindhoven to Amsterdam. A working visit centred on the topic of safety was organised for the state secretary at Rotterdam Centraal station. These working visits let stakeholders get to know our company in all its facets while at the same time increasing their understanding of the various issues. That makes them better able to assess matters.

Frequent consultations

ProRail, Ministry of Infrastructure and Water Management and LOCOV

NS holds frequent discussions 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 regularly has discussions with broadly represented passengers' and consumers' organisations. This statutory forum holds formal meetings and handles requests for advice on various issues relevant to passengers.

We also organise numerous 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 ROVER, Ieder(in), the cyclists' association, the KBO union of senior citizens' organisations and ANWB (the Dutch automobile association) on topics that have a longer-term impact, for example the purchase of new rolling stock, changes to the timetable, accessibility and interruptions to the service.

In 2018, NS and the consumer organisations discussed the introduction of NS Flex at great length. With NS Flex, NS is introducing a new and flexible form of travel in which passengers can pay in arrears rather than having to have credit on their smartcard, for instance. The consumer organisations in LOCOV felt this was a welcome development in theory but recommended adding some features to NS Flex before launching it. There is a dilemma between the desire to introduce the benefits of NS Flex and waiting for all the additional features. NS feels it is very important to make travelling more convenient for passengers and to have innovation in the options. Furthermore, NS Flex is an addition to the current payment options rather than a replacement. After weighing up everything, NS decided to introduce NS Flex in the summer of 2018. We are continuing to talk to consumer organisations about the development of the service.

NS and ProRail also organise station visits. These visits help us see 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 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 from door to door. This collaboration has acquired an increasingly prominent role at all levels of our organisation, not just operationally but also strategically 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. The more intensive collaboration with sector partners is also improving customer satisfaction due to better operational statistics for aspects such as punctuality and the quality of connections, and due to improvements in the journey to and from the station.

We are currently developing our strategy for the period through to 2025: 'We make the Netherlands accessible. For everyone.' In that strategy, we stress the relevance of collaboration. The process of developing the strategy involved us talking to over 70 external stakeholders about NS's role in the future of mobility in the Netherlands. One element in that is the collaboration with KLM in which we are investigating the options for improving international rail transport as a way of alleviating the pressure of passengers at Schiphol. This is in particular examining the routes to Berlin, London and Brussels.

Mobility Alliance

NS, ANWB, RAI (the association for manufacturers and importers of vehicles) and Transport and Logistics Netherlands have joined forces since 2016 in the Mobility Alliance, which aims to keep the Netherlands moving. At the end of 2016, the alliance presented its vision entitled *VOORUIT!* ('Forward!'), prompted by a shared sense of urgency because the Netherlands is becoming so congested as well as a realisation that there are opportunities to make mobility in the Netherlands cleaner, smarter and safer. The alliance now includes 23 bicycle, car, transport, public transport and business passenger organisations and its vision has been translated into concrete plans. In talks with Ms Van Nieuwenhuizen, the Minister of Infrastructure and Water Management, the alliance has explained its plans. It is now working on carrying out pilot projects in various areas.

Paying attention to the regions

There were talks in 2018 with the provincial executive members responsible for Traffic and Transport. The topics discussed included the InterCity to Berlin, Greater Amsterdam and specific services. The provincial executive members recognise NS's distinct position in society compared with the local carriers in regional tenders but they see this mainly in specific cases and from a strategic and financial perspective. The members were positive about the attention NS is paying to the regions and the fact that we took the initiative to start a dialogue. They thought it was good for the relationship and a reason for further, more detailed talks.

Masterclass: First-Class Railway Knowledge

Civil servants and administrators in municipalities, provinces and urban regions regularly ask NS questions (via its regional boards) about the 'railway world'. Who takes the decision to install a lift at the station? How can a municipality get a new station built? What role does NS have in the High-Frequency Rail Transport Programme? That is why at least twice a year, the NS regional boards and ProRail organise *First-Class Railway Knowledge*, a masterclass in which we share our knowledge and give local, provincial and regional government officials a better understanding of various aspects of the railway system (which can be rather complex). The masterclass is usually attended by 50 to 70 people. We ran three masterclasses in 2018: one on construction around the track and stations, one on level crossings and area development and a special one on ProRail's draft Management Plan and NS's draft Transport Plan.

Dilemmas in the discussions

NS shares the dilemmas it is facing in good time with stakeholders 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 the regular discussions and in reports. We have to make a great many choices when drawing up a new timetable, for example. The aim is to have something many passengers will benefit from, although there will also inevitably be groups of passengers for whom any given choice has an adverse effect. We talk to consumer organisations about these dilemmas.

An example of a dilemma is the timetable during major events. When a big event is on at the RAI convention centre, demand for the service to and from Amsterdam RAI station is much higher. If these passengers are to be transported in comfort and safety, it may be necessary to have through Intercity trains make an extra stop at Amsterdam RAI station. In the past, not having such extra stops caused serious safety problems with the transfer and departure of passengers during the *Huishoudbeurs* home and interior exhibition. The metro is not a good enough alternative in these situations. An extra stop costs time and therefore requires adjustments to the timetable. There is not much room for such stops in the timetable. To adapt the timetable to the requirements, it was necessary this year to cancel the stop at Duivendrecht station during the *Huishoudbeurs* and *Horecava* exhibitions, despite the problems this caused for commuters to and from Duivendrecht. These regular passengers faced additional journey time. The consumer organisations criticised this. In response to this, NS has taken another look at the 2019 timetable. It seems to be possible to stop at both Duivendrecht and Amsterdam RAI when special events are on. This does depend on the final allocation of capacity. Based on advice from passengers' organisation ROVER, the extra stops will only be made in 2019 during the opening hours for these events.

Regional case: fast changeovers for passengers in Friesland

In the 2018 timetable, the number of trains between Leeuwarden and Meppel in the province of Friesland was increased from three to four an hour in both directions. Most passengers benefited from this increase. However, for passengers to and from Grou-Jirnsom, Akkrum and Wolvega, this change meant a longer changeover for the Intercity trains to the Randstad conurbation. This dilemma was discussed in the North Netherlands Public Transport and Railway discussion body. This discussion body is where public sector organisations, passenger organisations and carriers make agreements about such matters as rail and bus transport, station development and innovation in public transport. In September 2018, the Public Transport and Railway discussion body asked NS to change the timetable in Friesland so as to improve the changeover for passengers travelling to or from Friesland. NS and ProRail aim to implement this change in 2019.

International case: Berlin

17 September 2018 saw the departure from Amsterdam Centraal station of a symbolic faster Intercity train to Berlin, seen off by State Secretary Van Veldhoven. This one-off service was half an hour faster because it did not stop anywhere else in the Netherlands. NS wants the journey time from Amsterdam to Berlin to be two hours shorter, in order to make the train a genuine alternative to the plane. To achieve this, NS is seeking collaboration with Deutsche Bahn, governmental authorities in the Netherlands and Germany, and Brussels.

NS then spent two days in Berlin holding further talks with representatives and directors of more than ten relevant bodies and governments, including the European Commission, the German Federal Ministry of Transport, the administrations of the German state of Lower Saxony and the city of Berlin, and Deutsche Bahn. All parties agree that it is time the Amsterdam-Berlin route was improved to give passengers a better product with shorter journey times and a greater level of comfort. Mr Ferlemann of the Federal Ministry also said that he wanted to see improvements soon in the existing route and promised infrastructure upgrades would be speeded up. Speaking on behalf of the European Commission, Elisabeth Werner said that capital-to-capital connections are a priority in Europe and that this particular connection could be the perfect showcase.

It should become clear in the next six months how the route could become faster in the short term – and what infrastructure investments are required in the Netherlands and Germany in order to make significant reductions in the journey time and obtain a train connection that offers a valid alternative to flights between the two cities in terms of journey time and comfort.

Consultations with the trade unions

NS attaches great importance to good relations with the trade unions. In 2018, the discussions mainly concerned implementation of the agreements in the 2017-2020 collective labour agreement and the resulting HR policy. NS and the trade unions also discussed the implementation of the social plan and the pension plan.

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 lets us facilitate dialogue not only between stakeholders and NS, but also among the stakeholders themselves. This regularly leads to a better understanding of one another's interests and valuable constructive criticism and ideas for NS.

The future for NS

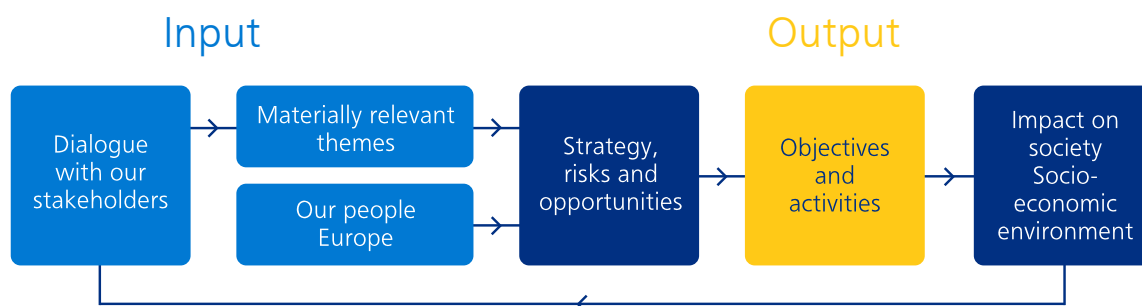
In April 2018, NS organised a central stakeholder dialogue session with 70 organisations that NS has contacts with. The idea was to share thoughts about 'the NS of the future; the future for NS'. Consumer organisations, ProRail and trade unions attended this event, along with other organisations. The Executive Board spoke to those present about the trends and developments that are relevant to the future of mobility in the Netherlands. Examples are the demographic developments with growth in the Randstad conurbation and population decline in other more rural areas, IT, changes in the use of data and innovations such as self-driving cars. A shared vision emerged of the challenge facing all of us to keep the Netherlands accessible and a pleasant place to live.

Inspirational dinner

In June, NS organised an inspirational dinner on 'Corporate social responsibility and entrepreneurial innovation'. These issues are not unique to NS; they are relevant to other organisations too. The choices that public authorities make are also a determining factor in how accessible the Netherlands is now and in the future. With thirty CEOs and directors attending along with the NS Executive Board and Supervisory Board, the topics discussed included business models, innovation, data, the political context, the NS 'signature' and other social themes. The recommendations that NS received during the evening will be taken on board in the development of a strategy for the future.

Scientific publications and series of seminars

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 affect the mobility of the future. That is why NS, ProRail and the public transport companies GVB, HTM and RET have taken the initiative for a series of 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 make a contribution not so much through the policy conclusions themselves as through the substance of the underlying analyses and factors to be considered. Professors Bert van Wee (Delft University of Technology) and Maarten Jansen (Vienna University) are responsible for the content. See also www.detoekomstopderails.nl. NS will take the results of the seminars on board in the development of a strategy for the future.



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 |
|---|--|---|---|
| EU institutions, CER, UIC, ERA | For information 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 routes between urban centres in Europe (for distances of around 700 km). | <ul style="list-style-type: none"> Strengthening the position of the passenger and supporting NS's position as the key rail passenger carrier in the Netherlands. NS's reputation as a sustainable partner. |
| National (NL) | Nature of dialogue | Content of dialogue | Effects of the dialogue on NS policy |
| Customers (consumers and businesses) | For information, monitoring | 2, 3, 6, 11 Timetable, public transport smartcard, customer satisfaction, handling complaints and inquiries, consumer portfolio, corporate portfolio, collaboration with bus, tram and metro companies | <p>Improved services, including:</p> <ul style="list-style-type: none"> NS Flex goes live. Over 55,000 customers now travel with the convenience of paying in arrears. 40% discount on the IC Direct surcharge in off-peak hours to persuade customers to travel in the quieter off-peak hours rather than in the crowded trains. Collaboration between Mecanoo, Gispens and NS on vision for train interiors in the future. Success in changing lecture times in Nijmegen to spread students' travel in peak times. Talks are ongoing with various cities. NS ZitplaatsZoeker app (seat searcher) is being rolled out for various types of train. It shows where most free seats are in each carriage. The discount when travelling together is even easier to obtain. Available as an e-ticket too as of November. 6,000 new public transport bicycles added in autumn 2018. Considerable increase in number of trips 30 % w.r.t. 2017. GoAbout and Booking.com have started pilots for sale of train tickets. Makes it even easier to introduce new groups of travellers to public transport. Testing personal guidance for door-to-door journey in the NS Lab App (as of 3 December 2018) with personal journey calendar, real-time check-in/check-out confirmation, station maps with pedestrian directions, up-to-date personal journey information and entertainment. |
| Shareholder Ministry of Finance | Intensive involvement | 1, 2, 7, 13, 14, 15 Performance of NS, remuneration, strategy, appointments, major investments, norm for returns from State participations | <ul style="list-style-type: none"> Determining financial policy and Executive Board remuneration Transparent reporting as per GRI Progress in GRC measures Progress in 'Spoorslags Beter' strategy Foreign activities |
| Ministry of Infrastructure and Water Management | Intensive involvement | 1, 2, 3, 4, 5, 6, 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 smartcard, accessibility, timetable, transparency | <p>Including:</p> <ul style="list-style-type: none"> 2018 Transport Plan Timetable in 2019 and 2020 HSL South product steps: Eurostar and IC Amsterdam-Brussels via HSL South Rolling stock: start deployment of New Generation Sprinter trains International transport: faster IC Berlin train to InnoTrans Transparency: dashboard (N.B. will be made specific) Safety: ORBIT built in accordance with 2018 Transport Plan. |
| National political bodies | For information, intensive involvement | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16 NS strategy, operational performance, sustainability, new rolling stock, ERTMS, main rail network franchise including HSL, international train connections, public transport smartcard/ access gates, diversity policy, personal/railway safety, timetable, coping with winter and seasonal conditions, service at stations, suicide prevention. | <p>Including:</p> <ul style="list-style-type: none"> Investigation into speeding up and extending international connections Dialogue on avoiding the peak for measures to alleviate the main peak Accessibility programme for trains and stations Transparency and level playing field, including at stations Package of measures for personal safety |
| Supervisory authorities – ACM, IL&T, Dutch Data Protection Authority | Involvement, consulting ('guidance') and information | 1, 2, 4, 7, 9, 10, 11, 12, 13 | <ul style="list-style-type: none"> Improved implementation and service |



| European | Nature of dialogue | Content of dialogue | Effects of the dialogue on NS policy |
|---|--|---|---|
| | | <p>Answering regular and ad hoc requests for information.</p> <p>Discussing topical subjects such as achieving a more professional safety culture, market issues, acceptance of rolling stock, safety incidents, incident investigations, clarification of the application of new legislation and regulations, and providing input for market studies and consultations.</p> | <ul style="list-style-type: none"> • Promoting compliance • Transparency • Position statements< • Improving safety on the tracks |
| ProRail | Intensive involvement | <p>1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12</p> <p>Long-Term Rail Agenda, timetable development, performance of the rail system, availability of infrastructure, safety, accessibility, station development, ERTMS</p> | <p>Including:</p> <ul style="list-style-type: none"> • Realisation of Better • Cooperation on seasonal measures • Cooperation on safety and safety policy, accessibility and station development • Functionality of infrastructure for the timetabled services • ProRail dashboard for day-to-day performance on the tracks • Vision for sustainable stations |
| LOCOV (National public transport users' forum) | Intensive involvement | <p>2,3,6,7,8,9,10,11, 12</p> <p>NS timetable, fares, journey information, public transport smartcard, service delivered to passengers, Transport Plan, customer satisfaction, punctuality, new rolling stock, withdrawals from service, accessibility, international connections, HSL services, NS strategy.</p> | <p>Including:</p> <ul style="list-style-type: none"> • A better train product by processing timetable suggestions made by consumer organisations • Clearer general conditions for refunds for delays • Improvements in Group Return product (implemented in 2018). • No differences between NS Flex and Pre-Paid Travel in first class fares following advice by the consumer organisations (decision of October 2018, implemented 2019). |
| Interest groups and NGOs (including employers) | Involvement, consultative, for information | <p>1, 2, 3, 4, 5, 6, 9, 11, 16</p> <p>Encouraging sustainable mobility (via employers), contributing to Climate Agreement, next move for NS in energy transition, circular economy, social policy, making replacement bus service more sustainable, next step in promoting accessible train travel for people with visual, motor or hearing impairments</p> | <p>Including:</p> <ul style="list-style-type: none"> • Making NS's own mobility policy more sustainable • Safeguard measures for encouraging sustainable mobility via employers in the climate agreement and other policies. • Collaboration with 45 major employers in 'Anders Reizen' coalition on implementation of measures to further sustainable mobility • Jobs created for people who are disadvantaged in the labour market • Investigation started into deployment of own assets for generating energy • Refining impact calculations for better investment decisions |
| Trade unions | Intensive involvement | <p>4, 12, 16</p> <p>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</p> | <ul style="list-style-type: none"> • Implementation of collective labour agreements 2017-2020 and resulting HR policy • Implementation of the Social Plan • Implementation of the pension plan • Implementation and evaluation of a packet of measures for personal safety and the Wage Tax (Implementation) Decree |
| Suppliers, subcontractors | Consulting and making acquaintance, negotiating conditions, making contract agreements, intensifying collaboration, innovation and development | <p>5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16</p> <p>Sustainability, specifying, transparency, financial position, integrity, innovation, reliability, risk management, collaboration, intensification</p> | <ul style="list-style-type: none"> • Achievement of CSR objectives (by making entire supply chain more sustainable) • Introduction of new products and services • Focus on more value creation for NS • Focus on reliability and availability of products and services for business-critical processes • More attention to compliance with legislation and regulations • Agree mutual expectations with suppliers • Introduce new suppliers • Encourage cooperation and innovation with partners |
| Media | For information, intensive involvement | All NS-related subjects | <ul style="list-style-type: none"> • Position statements • Improving NS imaging in line with operational performance |
| Regional authorities and official representatives of the provinces, metropolitan regions and municipalities, other transport carriers and consumer organisations | Informational, negotiations, contractual agreements, crisis management, collaboration, exploring and investigating | <p>1, 2, 3, 4, 6, 7, 8, 9, 10, 12</p> <p>Quality of train services, crowded trains, punctuality, network development, redevelopment of existing stations, public transport and railway discussion bodies, administrative coordination of the long-term infrastructure, spatial and transport programme for the northwest Netherlands, picture of the future of public transport and the Public Transport Development Agenda, national environmental strategy, timetable, cross-border transport, access gates, personal safety and railway safety, transport sector-wide agreements, regional franchises, noise nuisance near the railways, hub development</p> | <ul style="list-style-type: none"> • New, more modern stations and redevelopment of station surroundings • New agreements on night trains • Agreement about the installation and accelerated rollout of access gates • Tailored regional solutions for replacement bus service when train services are interrupted • Joint public transport development agendas for attractive stations and better accessibility from door to door • Customisation in the main rail network timetable and better connections to regional public transport • Feasibility study for high-frequency Sprinter service on the western route Amsterdam, Airport Sprinter |

| European | Nature of dialogue | Content of dialogue | Effects of the dialogue on NS policy |
|----------|--|----------------------------|--|
| | | | <ul style="list-style-type: none"> • MIRT multimodal hub at Schiphol on the investment agenda in conjunction with investments in Greater Amsterdam • Various storage facilities free of charge for first 24 hours, extension of P+R sites • Formulating regional goals for the picture of the future for public transport • Eindhoven International Hub XL • Door-to-door journey (incl. MaaS projects) • Optimising the Noord-Holland North timetable |
| | Internal: central and local Works Councils, vocational training | See chapter NS as employer | • |

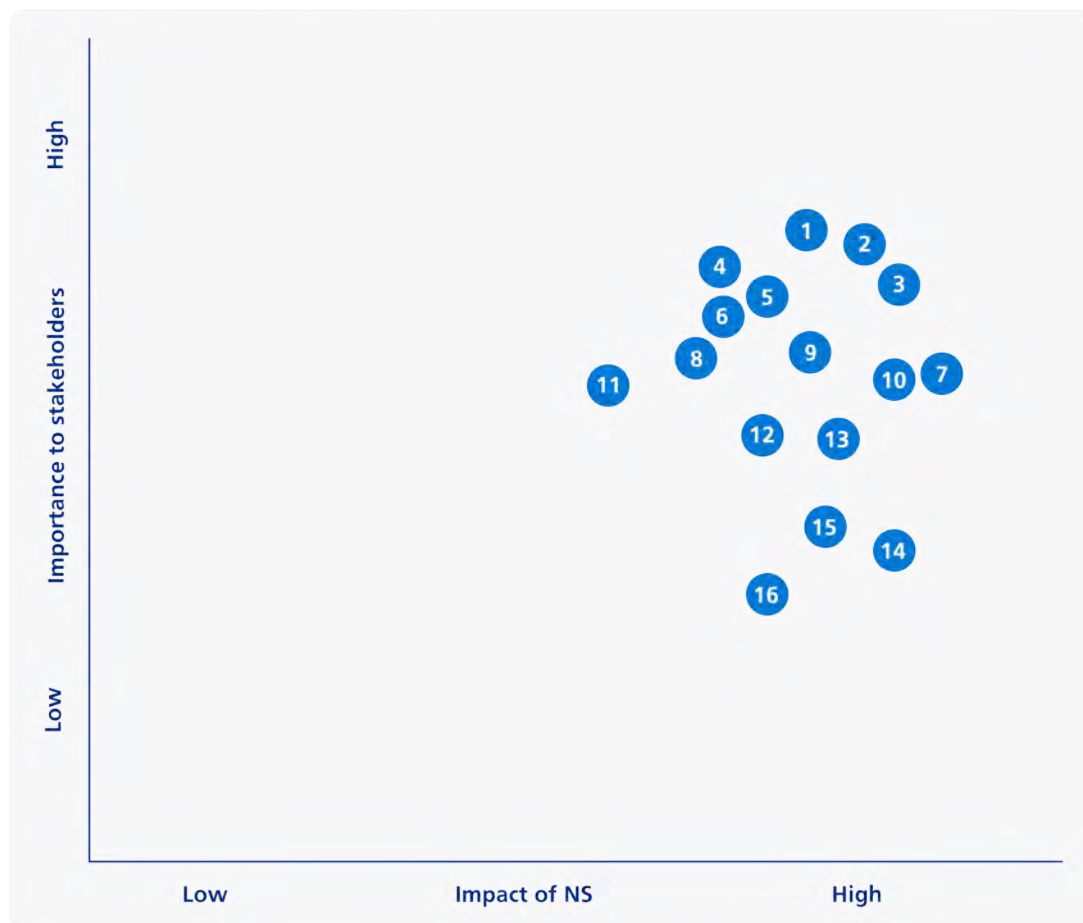
Our materially relevant themes

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. At least once every two years, NS arranges centralised dialogues with all categories of stakeholders about our social role and the themes that they find important and that our organisation has an impact on, i.e. the materially relevant themes. The last dialogue took place in 2017. We draw up a material relevance matrix based on that meeting and a biennial survey of our stakeholders. 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 2018

NS assessed the materially relevant themes for 2018 to check that they were as topical and valid as in 2017. 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 2018 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 function 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 11. No themes have been added or removed, although some themes have shifted somewhat. The importance of 'Integrity' (number 7) as a policy priority has diminished because of the visible progress we have made in recent years in the area of compliance, risk management and integrity. NS's impact in the theme of 'Collaboration' (number 4) has increased, in part due to the activities of the Mobility Alliance, the collaboration with KLM to put international rail transport on the agenda, and the collaboration with educational institutions aimed at reducing peak-hour crowding. Regarding 'Innovation' (number 12), both the importance for stakeholders and the impact of NS have declined slightly as many sector-wide innovations are currently emerging in which the impact of NS is just part of the innovation. 'Operations in Europe' (number 15) has increased in importance as a theme, in part because of the introduction of IC Brussels, the Amsterdam-London Eurostar service, the plans to speed up the Intercity Berlin service, and short cross-border transport routes (KGOV).

Material relevance matrix 2018



- | | |
|---|---------------------------------------|
| 1 Reliability | 9 Accessibility |
| 2 Transparency (internal and external) | 10 Station facilities |
| 3 Passengers, passengers and passengers / Customer satisfaction | 11 Safety (including personal safety) |
| 4 New: collaboration (internal and external) | 12 Innovation |
| 5 Sustainability (internal and external) | 13 Risk management |
| 6 Seamless door-to-door journeys | 14 Financial position |
| 7 Integrity | 15 Operations in Europe |
| 8 Punctuality | 16 An attractive and caring employer |

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 the senior management aims for collaboration (both within the organisation and beyond) and puts collaboration with partners in the transport sector into practice.
5. **Sustainability:** the extent to which NS makes efforts in the interests of people, planet and profit
6. **Seamless door-to-door journeys:** the extent to which NS works on enabling door-to-door journeys without any problems
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 the 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, remuneration policy and career development

Strategy and materially relevant themes

| 1. Strategic priorities | 2. Indicators with a quantitative target value | 3. Objectives | 4. Results | 5. Risk factors | 6. (Result/prospects) | |
|---|---|--|-------------------|------------------|--|-----------------------------------|
| Themes | Materially relevant subjects | KPI | Objective in 2018 | Achieved in 2018 | Risks | Social impact/trend |
| An attractive physical offering | Punctuality/reliability/cooperation | Punctuality | | | Market regulation, infrastructure capacity, reliability of IT, | Journey time, SDG 11, 13,17 |
| | | % passenger punctuality to 5 min. on main rail network | 88.9% | 92.6% | | |
| | Travel without barriers | Quality of connections with other carriers | 94.0% | 95.8% | | |
| | Accessibility/reliability/travelling without barriers/cooperation | Accessibility | | | | Journey time |
| | | Seat availability at peak times | 94.3% | 95.1% | | |
| | | Seat availability at peak times on problem routes | 4.9% | 2.5% | | |
| Optimising the customer experience | Passengers, passengers and passengers/customer satisfaction/travel without barriers/cooperation | Customer experience | | | Market regulation | Mobility, SDG 11 |
| | | General customer satisfaction | 74% | 86% | | |
| | Safety (including personal safety)/cooperation | Personal safety | | | Safety | Personal safety |
| | | Passengers' perception of safety | 81% | 90% | | |
| | | Reputation (RepTrak) | 60 in 2020 | 61.4 | | |
| Performance of HSL South | Prioritising passengers, passengers and passengers/customer satisfaction/cooperation | Customer experience | | | HSL service | Mobility, SDG 11, 17 |
| | | General customer satisfaction with HSL South | 68% | 83% | | |
| | Punctuality/reliability | Punctuality | | | HSL service | Journey time |
| | | % passenger punctuality on HSL South | 82.1% | 82.5% | | |
| | Accessibility/reliability | Accessibility | | | HSL service | |
| Seat availability on HSL South | | 91.2% | 94.0% | | | |
| Perfect execution | Prioritising passengers, passengers and passengers/customer satisfaction/cooperation | Punctuality | | | Market regulation, infrastructure capacity, reliability of IT, | Journey time, SDG 9, 11, 13, 17 |
| | | % passenger punctuality to 15 minutes on main rail network | 96.7% | 97.7% | | |
| | Travel without barriers | Journey information | | | IT reliability | Journey time |
| | | Information about delays | 75.0% | 85.2% | | |
| | | Customer satisfaction with journey information for the whole journey | 81.4% | 85.0% | | |
| World-class stations | Station facilities/cooperation | The station experience | | | | SDG 7, 9, 11, 12, 13, 17 |
| | | Customer satisfaction with stations | 68.0% | 76% | | |
| Safe and sustainable travel | Sustainability/cooperation | Sustainable operations | | | | Environment, SDG 7, 9, 11, 12, 13 |



| | | | | | |
|---|-----------------------------------|--|-----------------------|--------|---|
| | | Perception of NS as a sustainable business | Top 10 in 2020 | 8 | |
| | | Energy efficiency of traction | 72% | 74% | |
| | | Separating out waste | 75% recycling by 2020 | 45% | |
| | Transparency | Transparency | | | Non-compliance |
| | | Position in the Transparency Benchmark | top 10 | top 21 | |
| | Safety | Railway safety | | | Safety |
| | | Number of signals passed at danger in NL | 51 | 61 | |
| Abellio | Operations in Europe | no KPI available for this | n/a | n/a | |
| NS as an employer | An attractive and caring employer | Employees | | | Safety training, SDG 8 |
| | | Employee engagement | none | none | |
| | | People with occupational disabilities | 200 before 2018 | 82 | |
| | | Women in senior management | none | 35% | |
| | | TRR | -- | 5.3 | safety at work |
| | | Sickness absence | 5.1% | 6.0% | |
| Risk management | Risk management | Risk management | | | |
| | | Management of significant risks | Reports 4x a year | 100% | |
| Improvement in result and financing capacity | Financial position | Financial position | | | Inadequate operating result, NS investments abroad expenditure, SDG 8 |
| | | Revenue (in € million) | | 5,926 | |
| | | ROE | | 4.0% | |
| | | Investments (in € million) | | 909 | |

Sustainable development goals

The sustainable development goals (SDGs) function 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 difference by 2030 in nine sub-goals within seven SDGs. NS is consulting internal and external stakeholders to determine whether these should be the goals or whether more focus is needed. We took the first step before and during the centralised stakeholders' dialogue: we asked whether this was the right choice of goals and what position NS should adopt with regard to the selected goals. Most of the stakeholders could identify with the goals and sub-goals selected. See also the final column in this diagram.

In 2019, NS will continue the dialogue on the strategy formulation and we will also set KPIs and targets. Targets set previously for 2020 concerning doing business in a climate-neutral and inclusive way, focused on the 'circular economy', plus accessibility will remain important in determining the direction NS takes in the next few years and will be used in steering the transport supply chain.



Sub-goals

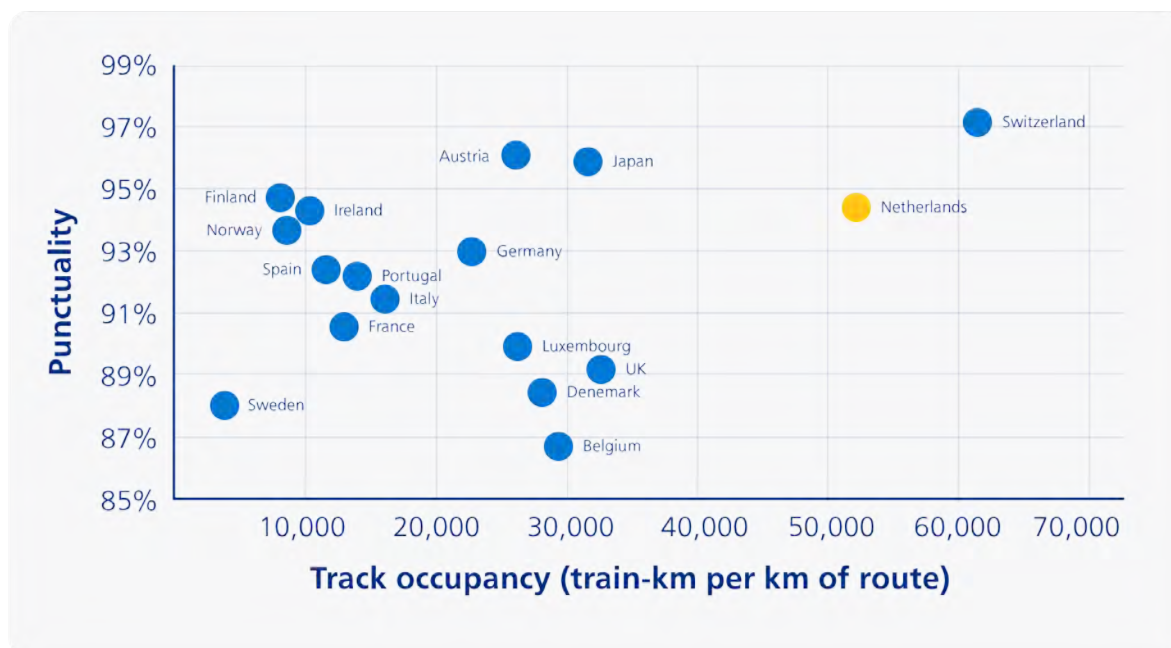
- Sustainable mobility for all: affordable, safe, accessible; reducing the environmental impact in cities (air)
- Innovations aimed at modernising the mobility sector and making it more sustainable; severing the link between growth and environmental impact; fair and sustainable procurement policy
- Climate change: more renewable, more energy-saving and reduced use of materials for our own products and services, influence on the policy and course of third parties, adaptation and raising awareness
- A decent employer: equality, diversity and inclusiveness, getting young people into work

Our performance in a wider context

Punctuality in a busy railway network

Source: NS

Punctuality



A comparison between punctuality and track occupancy in eighteen countries shows that NS is in the top three. 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 number of train-kilometres is the total volume of traffic on the railway (number of trains multiplied by the distance they cover). The number of route-kilometres is the length of the tracks.

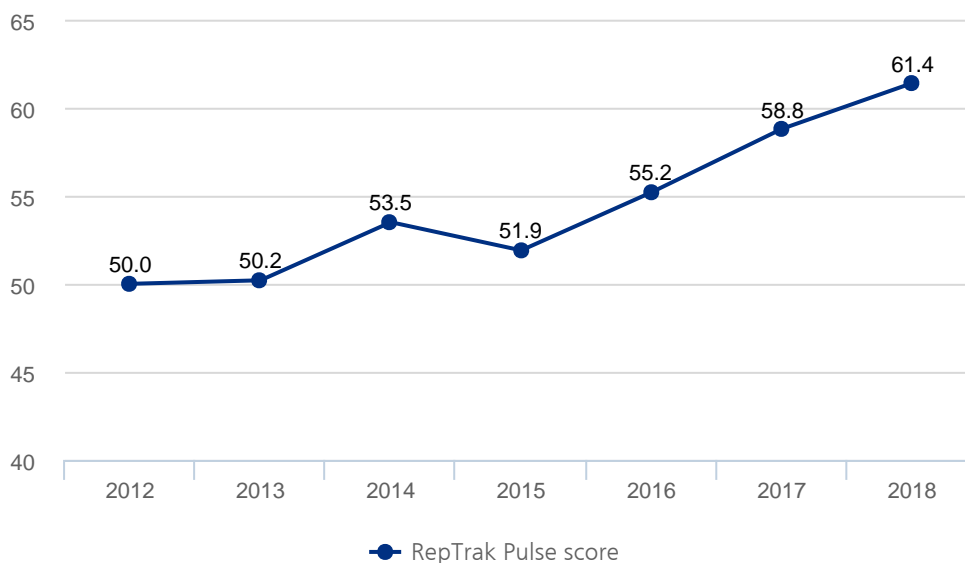
Benchmark

In comparison with other European countries, Dutch rail passengers travel in newer trains that are more frequent and are more likely to be on time. NS is also in the vanguard in terms of sustainability. It has high productivity levels, which means that customers pay fares that are around the average even though NS does not receive subsidies. In 2019, we will be performing a benchmark again; its results will be part of the midterm review.

Reputation

Our reputation is an indicator for the attractiveness of travel with NS. NS obtains regular measurements of its reputation using the RepTrak method (from the Reputation Institute). The score has improved during recent years. The reputation score was 51.9 in 2015 following one or two major disruptions, publicity surrounding aggression against NS staff, the irregularities in the tender in Limburg and the parliamentary inquiry into Fyra. An improvement was seen in the score in 2016 (55.2), a trend that continued in 2017 with an average score of 58.8, and 2018 with an average of 61.4. The improved operational performance in 2017 was sustained in 2018, with greater punctuality for passengers and fewer cancellations, which meant a more reliable product for passengers. NS was not in the media quite so much as in 2017 in terms of volume, and sentiments regarding NS on social media became more neutral again and less negative. The positive development in our reputation is also reflected in the trend in customer satisfaction.

Development Reprak-pulse score NS



More sustainable image for NS

Since 2017, all our electric trains have been running on wind power. Thanks to our sustainability efforts, we have been able to make it clear to Dutch consumers that NS is the leading sustainable option if they want to travel anywhere. The 2018 *Dossier Duurzaam* sustainability survey shows that NS's sustainability reputation has improved significantly this year. Our score increased to 41, whereas in previous years we scored 37 points or less. NS rose in the list of sustainable companies, ending up in the same position as IKEA, Philips and Albert Heijn, with ranks 8 to 11.

The survey also showed that the group of consumers with a positive basic attitude to sustainability grew from 59% to 63%. The willingness of this group to pay a little extra for sustainable products also increased. Another notable finding is that the more frequently passengers travel by train, the more positive their assessment of NS with regard to CSR themes. More than half of all people (52%) find sustainability an important aspect in their choice of mode of transport.

NS's involvement in the climate agreement

In 2018, NS was involved in the mobility discussion body for the climate agreement. Together with other organisations, NS is making an active contribution to reductions in CO₂ emissions produced by mobility. Travelling by NS train is fully climate-neutral because the trains run on wind power. Encouraging use of the train makes a direct contribution to the reduction of CO₂ emissions in the Netherlands.

Sustainable mobility

Dutch employers facilitate 56% of kilometres driven on the roads. That makes them a significant key to the reduction of CO₂ emissions generated by mobility. At the initiative of the Confederation of Netherlands Industry and Employers (VNO-NCW), the Ministry of Infrastructure and Water Management, Nature and the Environment and NS, fifteen organisations joined forces in 2015 to boost the sustainability of business travel among their employees. They formed the group Anders Reizen. In 2018, this coalition grew to 45 participating companies representing more than 300,000 employees in the Netherlands. They came together on various occasions in 2018 to share success stories and problems. Based on the best practices, a vanguard policy was established with the top ten measures with the most

impact on CO₂ emissions caused by work-related mobility. A new focus is on reducing air travel, replacing it by rail travel up to a radius of 700 kilometres. Factors inhibiting more sustainable mobility that are not company-specific (such as tax issues, flight alternatives, electrification and employee benefits) are discussed in central working groups. The coalition is involved in the mobility discussion body for the climate agreement.

NS also participates in the Mobility Alliance, a broad coalition of parties in the Dutch car sector, the bicycle sector, freight road transport and public transport. Work was done in 2018 on a major programme for mobility. A key element in this plan is new ways of paying for mobility: payment will be geared more to usage rather than ownership. Within this programme, pilot projects have been formulated for experimenting with new ways of paying for mobility. They will serve as input for talks with the national government about the future for mobility.

Sustainable procurement

NS purchases over €1 billion of goods and services annually. NS has around 5000 suppliers in 24 different countries. Most of our purchases (about 98.5%) come from the Netherlands and Western Europe. Our goods and services cover staff, financial and facility services, IT, construction, communication, energy, trains and transport. More than 200 suppliers account for 80% of our goods and services.

As the purchasing party, NS can exert an influence on suppliers to get them to make their products and processes more sustainable. This lets them make a major contribution to our sustainability objectives. Our CSR requirements are stated in the procurement governance rules and are also embedded in the General Terms and Conditions of Purchase (www.nsprocurement.nl). We also work closely with our suppliers and challenge them to submit innovative and sustainable offers. We used the following initiatives to steer procurement:

Supplier assessments

Since 2014, we have been carrying out Corporate Social Responsibility (CSR) assessments at our biggest suppliers, who account for about 60% of the total spend. We look at how they handle aspects such as the environment, the social and ethical sides, and the supply chain. Scores make it possible to compare suppliers and estimate the risks. As of 2015, these assessments are also used when awarding contracts. The CSR assessment is mandatory for parties who are awarded a contract. Together with around ten major European carriers and rail suppliers, NS is working on Railsponsible with the aim of having the method accepted as the standard in the rail industry.

Making procurement more sustainable by using tendering plans and 'circular-economy' purchasing

NS uses a tendering plan for its EU tendering activities. This is an internal document that describes the process steps that are needed when preparing an invitation to tender. The tendering plan applies the principles of Socially Responsible Procurement (SRP) when formulating the selection and award criteria. These criteria have been embedded in the plan since 2015.

Code of conduct for suppliers with the biggest spend

The code of conduct became part of the contract for new suppliers in 2015. The code of conduct explicitly states the conditions under which we want to do business with suppliers. One general requirement, for instance, is that suppliers must shoulder their share of responsibility in socially aware business practices and subscribe to the principles encapsulated in relevant standards, as laid down in such documents as the Universal Declaration of Human Rights and 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. NS arranged 43 audits in 2018; no infringements were found. In cases of serious violations such as corruption, a decision to terminate the relationship may be made. Exclusion criteria also apply to subcontractors used by our suppliers.

NS has drawn up a policy to prevent bribery and corruption. As part of the implementation, all purchasers within NS take an e-learning module on Ethics & Compliance, and the importance of the proper observance of the policy is highlighted.

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 size 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.

Transparency

NS is transparent about its performance. Every month, it reports via 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 in the permanent group that is assessed in the Transparency Benchmark. This is a tool provided by the Ministry of Economic Affairs for improving reporting on social matters within the Netherlands. The results are presented in a Transparency Ladder that is made publicly available and widely communicated. Our ambition is to stay in the top ten. In 2018, NS was one of the nominees for the Crystal Prize, which is associated with the Transparency Benchmark (sixth in 2017).

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.

NS commissioned EY to provide the external limited assurance for the report. The sustainability information is found in the following chapters in the NS annual report: In Brief, 2018 in a Nutshell, Foreword by the CEO, The Profile of NS, Our Strategy, all the chapters included in Activities in the Netherlands and Operations Abroad, Our Impact on the Environment and on Society, NS as an Employer in the Netherlands, 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 2018 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 environment 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 and the performance indicators 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 materially relevant topics and drawing on the insights given 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 NS has. Themes where NS has little impact or that are not seen as so important by stakeholders are not included in the report. Abellio was involved in the dialogue with the Dutch stakeholders.

The report covers the 2018 financial year, which ran from 1 January 2018 to 31 December 2018. 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/mvoberekeningen. 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 this is done, this is explained. Acquisitions are included in the data from the date of acquisition; disposals are included until the date of disposal.

Financial statements

These financial statements are published both Dutch And English. In the event of any discrepancies between the Dutch And English version, the Dutch version will prevail.



Financial statements

Consolidated income statement for 2018

| (in miljoenen euro's) | | 2018 | 2017* |
|-----------------------|---|--------------|--------------|
| 1 | Revenue | 5,926 | 5,121 |
| 2 | Personnel expenses | 2,166 | 2,033 |
| 3 | Depreciation, amortisation and impairments | 361 | 369 |
| 4 | Use of raw materials, consumables and inventories | 527 | 505 |
| 5 | Own capitalised production | -154 | -161 |
| 6 | Subcontracted work and other external costs | 519 | 475 |
| 7 | Infrastructure and concession fees | 1,280 | 930 |
| 8 | Other operating expenses | 1,046 | 933 |
| | Total operating expenses | 5,745 | 5,084 |
| 15 | Share in result of investees recognises using the equity method | 14 | 20 |
| | Result from operating activities | 195 | 57 |
| | Finance income | 6 | 16 |
| | Finance expenses | -20 | -21 |
| 27 | Net finance result | -14 | -5 |
| | Result before income tax | 181 | 52 |
| 9 | Income tax | -65 | -5 |
| | Result for the period | 116 | 47 |
| | Attributable to: | | |
| | Shareholder of the company | 106 | 46 |
| | Minority interests | 10 | 1 |
| | Result for the period | 116 | 47 |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1.

Consolidated statement of comprehensive income for 2018

| (in millions of euros) | 2018 | 2017* |
|---|------------|-----------|
| Result for the period | 116 | 47 |
| Other comprehensive income items that are or may be classified to profit and loss | | |
| Currency translation differences on foreign activities | - | -3 |
| Effective portion of changes in fair value of cash flow hedges | -3 | 3 |
| Income tax | - | - |
| Effective portion of changes in fair value of cash flow hedges as a consequence of revaluation of investments in equity accounted investees | - | - |
| | -3 | - |
| Other comprehensive income items that never be reclassified to profit and loss | | |
| Actuarial result for defined benefit plans | - | 1 |
| Income tax | - | - |
| Actuarial result for defined benefit plans as a consequence of revaluation of investments in equity accounted investees | - | - |
| | - | 1 |
| Other comprehensive income recognised in equity | 113 | 48 |
| Attributable to: | | |
| Shareholder of the company | 103 | 47 |
| Minority interest | 10 | 1 |
| Total comprehensive income | 113 | 48 |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1.

Consolidated statement of financial position as at 31 December 2018

| (in miljoenen euro's) | 31 december 2018 | 31 december 2017* |
|---|---------------------|----------------------|
| Activa | | |
| 11 Property, plant and equipment | 3,979 | 3,845 |
| 12 Investment property | 151 | 170 |
| 13 Intangible assets | 416 | 357 |
| 15 Investments recognised using the equity method | 17 | 26 |
| 23 Other financial assets, including investments | 159 | 158 |
| 10 Deferred tax assets | 196 | 260 |
| Total non-current assets | 4,918 | 4,816 |
| 16 Inventories | 169 | 161 |
| 17 Trade and other receivables | 830 | 648 |
| Income tax receivables | 16 | 24 |
| 19 Cash and cash equivalents | 906 | 565 |
| 18 Assets held for sale | 191 | - |
| Total current assets | 2,112 | 1,398 |
| Total assets | 7,030 | 6,214 |
| Equity and liabilities | | |
| 24 Equity | | |
| Share capital | 1,012 | 1,012 |
| Reserves | 2,498 | 2,418 |
| Unappropriated result | 106 | 46 |
| Total group equity | 3,616 | 3,476 |
| Minority interest | 11 | 1 |
| Total equity | 3,627 | 3,477 |
| 28 Deferred credits | 275 | 314 |
| 25 Loans and borrowings, including derivatives | 740 | 551 |
| 29 Employee benefits | 30 | 30 |
| 30 Provisions | 119 | 114 |
| 20 Accruals | 42 | 42 |
| 10 Deferred tax liabilities | 48 | 59 |
| Total non-current liabilities | 1,254 | 1,110 |
| 25 Loans and borrowings, including derivatives | 98 | 201 |
| Corporate tax payable | 12 | 26 |
| 21 Trade and other payables | 1,315 | 1,105 |
| 22 Deferred income | 694 | 246 |
| 29 Provisions | 24 | 49 |
| 18 Liabilities held for sale | 6 | - |
| Total current liabilities | 2,149 | 1,627 |
| Total liabilities | 3,403 | 2,737 |
| Total equity and liabilities | 7,030 | 6,214 |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1.

Consolidated cash flow statement for 2018

| (in miljoenen euro's) | 2018 | 2017* |
|---|-------------|-------------|
| Result for the period | 116 | 47 |
| Adjustments for: | | |
| Income tax expenses | 65 | 5 |
| Results on investments in equity accounted investees | -14 | -18 |
| 11, 12, 13 Depreciation | 361 | 354 |
| 11, 12, 13 Impairment losses and reversals | - | 15 |
| Net finance result | 14 | 5 |
| Change in provisions | 18 | 41 |
| 15.23 Change in non current financial assets (excluding deferred tax positions) | - | - |
| Change in other non cash, non-current liabilities | -31 | -25 |
| Change in deferred credits | -39 | -39 |
| | 374 | 338 |
| Change in inventories | -8 | -21 |
| Change in trade and other receivables | -142 | 62 |
| Change in current liabilities excluding credit institutions | 629 | -263 |
| Changes working capital | 479 | -222 |
| Interest paid | -17 | -22 |
| Income tax paid | -15 | -151 |
| | -32 | -173 |
| Net cash from operating activities | 937 | -10 |
| Interest received | 5 | 8 |
| 15 Dividends received and recognised using the equity method | 14 | 22 |
| Disposal of discontinued operation, net of cash | - | -13 |
| 11.13 Acquisition of intangible assets and property, plant and equipment | -898 | -612 |
| 12 Acquisition of investment properties | - | -7 |
| Receipts (payments) other investments | - | - |
| Acquisition of non-current financial assets, including investments | -33 | -11 |
| 15.23 Disposal of non-current financial assets, including investments | 30 | 157 |
| 11, 12, 13 Disposal of intangible assets, property, plant and equipment and investment properties | 228 | 1 |
| Net cash flow from investing activities | -654 | -455 |
| Net cash flow from operating and investing activities | 283 | -465 |
| Repayments of liabilities | -431 | -121 |
| Non-current liabilities taken out | 504 | 496 |
| Dividends paid | -8 | -79 |
| Net cash from financing activities | 65 | 296 |
| Net increase in cash and cash equivalents | 348 | -169 |
| Cash and cash equivalents as at 1 January | 565 | 709 |
| Effect of exchange rate fluctuations on cash held | -3 | -9 |
| Cash and cash equivalents classified as held for sale | -4 | 34 |
| Cash and cash equivalents as at 31 December | 906 | 565 |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1.

Consolidated statement of changes in equity

| (in millions of euros) | Share capital | Other reserves | Retained earnings | Total | Minority interest | Total equity |
|---|---------------|----------------|-------------------|--------------|-------------------|--------------|
| Balance as at 1 January 2017 | 1,012 | 35 | 2,464 | 3,511 | - | 3,511 |
| Effect change of accounting policy | | -39 | 37 | -2 | | -2 |
| Revised balance as at 1 January 2017 | 1,012 | -4 | 2,501 | 3,509 | - | 3,509 |
| Result current period | | | 46 | 46 | 1 | 47 |
| Other comprehensive income | | 1 | | 1 | | 1 |
| Total comprehensive income | - | 1 | 46 | 47 | 1 | 48 |
| Dividend paid | | | -79 | -79 | - | -79 |
| Other changes | | - | -1 | -1 | | -1 |
| Balance as at 31 December 2017 | 1,012 | -3 | 2,467 | 3,476 | 1 | 3,477 |
| Changes due to application of IFRS 9 | | 45 | - | 45 | - | 45 |
| Balance as at 1 January 2018 | 1,012 | 42 | 2,467 | 3,521 | 1 | 3,522 |
| Result current period | | | 106 | 106 | 10 | 116 |
| Other comprehensive income | | -3 | | -3 | - | -3 |
| Total comprehensive income | - | -3 | 106 | 103 | 10 | 113 |
| Dividend paid | | | -8 | -8 | - | -8 |
| Other changes | | - | - | - | - | - |
| Balance as at 31 December 2018 | 1,012 | 39 | 2,565 | 3,616 | 11 | 3,627 |

Notes to the 2018 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 2018 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 32. The Group's activities consist mainly of passenger transport and the management and development of property and station locations.

The Executive Board prepared the financial statements on 21 February 2018. In its preliminary report to the General Meeting of Shareholders, the Supervisory Board advised that the financial statements should be adopted unaltered. On 21 February 2019, 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 18 March 2019.

Acquisition and disposal of companies

No acquisitions or sales took place in 2018.

Significant accounting policies

Below is a description of the principles for consolidation, valuation of assets and liabilities and 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 Netherlands Civil Code. As a valuation principle, the Group applies the historical cost price system, unless stated otherwise.

The Group has implemented the following change in accounting policies in 2018:

Change in accounting policies relating to defined benefit pension plans in the United Kingdom

In the financial statements of 2018, the Group has changed the way it accounts for defined benefit rail pension schemes in the United Kingdom impacting the income statements. In the current franchise agreements it has been agreed upon that the franchisee is only responsible for agreed contributions, or a pension deficit over the period of the concession. When the concession has ended, all rights and obligations with regard to the employees will be transferred to the new franchisee.

As such only the portion of the surplus or deficit relating to the pension plan is recognized on the Group statement of financial position, that is expected to be realized during the term of the concession based on the assumptions and agreements on the balance sheet date. As a result, on 31 December 2018 and 31 December 2017, no net surplus or deficit has been recognized. This approach is unchanged in comparison to previous years.

The Group has 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 concession are recorded in the income statement. These net pension costs are therefore calculated, 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 concession period. This net calculation does take into account any allocation within the concession period that may (possibly) occur with the triennial assessments during the concession period or adjustments to the annual contributions over the concession period.

Up to and including 2017, the full IAS 19 service costs were recognised in the income statement. The Company has revised its accounting policy to now only recognise the Group's resulting share of service costs in its income statement. The net service cost is therefore calculated looking at the near term liability for the employees only, and the costs of the employer only, over the life of

the franchise rather than costs that will be borne by other parties. This compares to the previous approach where the full service cost was included within the income statement and the franchise adjustments arising were recognised through the statement of comprehensive income. The adjusted accounting policy provides a better insight into the part of the costs actually borne by the Group in the various concessions. 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 adjustment of this basis has also been made in the valuation of the group's interest in the joint venture Merseyrail Ltd.

The effect for 2018 and 2017 and also for the coming years is that the pension costs in the profit and loss account will decrease and the pension benefits in the overview of the total result will decrease accordingly. Based on the previous valuation principles, the 2018 result before income tax would have been € 35 million lower and the net result would have come in € 28 million lower.

The tables below provide a detailed overview of the effect of the changes made to the 2017 consolidated income statement and the 2017 consolidated statement of comprehensive income. The change has no effect on the size of the equity or other balance sheet items.

| (in millions of euros) | Reported in financial statements 2017 | Change accounting policy | Revised 2017 |
|---|---|--------------------------------|--------------|
| Revenue | 5,121 | - | 5,121 |
| Total operating expenses | 5,107 | -23 | 5,084 |
| Share in result of investees recognised using the equity method | 18 | 2 | 20 |
| Result from operating activities | 32 | 25 | 57 |
| Finance income | 16 | | 16 |
| Finance expenses | -21 | | -21 |
| Net finance result | -5 | - | -5 |
| Result before income tax | 27 | 25 | 52 |
| Income tax | -2 | -3 | -5 |
| Result for the period | 25 | 22 | 47 |
| Attributable to: | | | |
| Shareholder of the company | 24 | 22 | 46 |
| Minority interests | 1 | - | 1 |
| Result for the period | 25 | 22 | 47 |

| (in millions of euros) | Reported in financial statements 2017 | Change accounting policy | Revised 2017 |
|---|---|--------------------------------|--------------|
| Result for the period | 25 | 22 | 47 |
| Other comprehensive income items that are or may be classified to profit and loss | | | |
| Currency translation differences on foreign activities | -3 | - | -3 |
| Effective portion of changes in fair value of cash flow hedges | 3 | - | 3 |
| Income tax | - | - | - |
| Effective portion of changes in fair value of cash flow hedges as a consequence of revaluation of investments in equity accounted investees | - | - | - |
| | - | - | - |
| Other comprehensive income items that never be reclassified to profit and loss | | | |
| Actuarial result for defined benefit plans | 21 | -20 | 1 |
| Income tax | -2 | 2 | - |
| Actuarial result for defined benefit plans as a consequence of revaluation of investments in equity accounted investees | 2 | -2 | - |
| | 21 | -20 | 1 |
| Other comprehensive income recognised in equity | 46 | 2 | 48 |
| Attributable to: | | | |
| Shareholder of the company | 45 | 2 | 47 |
| Minority interest | 1 | - | 1 |
| Total comprehensive income | 46 | 2 | 48 |

As of 1 January 2018, the Group has adopted the following new standards and amendments to standards, including all consequent changes deriving from them in other standards.

IFRS 15 – Revenue from Contracts with Clients

IFRS 9 contains requirements for the recognition and measurement of financial assets, financial liabilities and some contracts for the acquisition or sale of non-financial items. This standard replaces IAS 39 Financial Instruments: Recognition and Measurement. NS applies this standard as per 1 January 2018 without adjustment of the comparative figures. The details of the new accounting policy for financial reporting and the nature and effect of the changes with respect to the previous accounting policy are set out below.

IFRS 15 provides a comprehensive framework for determining whether, how much and when revenue is recognized. It replaces IAS 18 Revenues, IAS 11 Construction Contracts and related interpretations. Under IFRS 15, revenue is recognized when a customer obtains control of the goods or services. Determining the timing of the transfer of control - at a certain point in time or in the course of time - generally requires judgment.

The Group has applied IFRS 15 using the cumulative effect method (without using practical expedients), with the effect of initial application of this standard at the date of first application (i.e. 1 January 2018). Accordingly, the information presented for 2017 has not been restated, i.e. the information has been presented in accordance with IAS 18, IAS 11 and related interpretations. In addition, the disclosure requirements in IFRS 15 have generally not been applied to the comparative figures.

The application of IFRS 15 has no material impact on the balance sheet and profit and loss account compared to the treatment under the previous guidelines. The group's products are predominantly non-combined products, with revenue being recognised over time or over time. For the Group, the time of conversion under IFRS 15 of these products is identical to that of IAS 18.

IFRS 9 – Financial Instruments

Classification and measurement of financial assets and financial liabilities

IFRS 9 largely retains the existing requirements in IAS 39 for the classification and measurement of financial liabilities. However, it eliminates the following IAS 39 categories for financial assets: 'held to maturity', 'loans and receivables' and 'available for sale'. The application of IFRS 9 has not had a significant effect on the Group's accounting policies for financial reporting with respect to financial liabilities and derivatives. The impact of IFRS 9 on the classification and measurement of financial assets is set out below. Under IFRS 9, a financial asset was measured on initial recognition at 'amortised cost', 'fair value recognised through comprehensive income – investments in debt instruments', 'fair value recognised through comprehensive income – investments in equity instruments' or 'fair value through the income statement'. The classification of financial assets under IFRS 9 is based on the NS business model within which the financial asset is managed and the characteristics of the contractual cash flows.

The following accounting policies for financial reporting apply to the application of subsequent measurements of financial assets.

Financial assets in the case of fair value via the income statement

These assets are subsequently valued at their fair value. Net profits and losses, including any interest or dividend income, are recognised in the income statement.

Financial assets at amortised cost

These assets are valued at amortised cost using the effective interest method. Impairment losses are deducted from the amortised cost. Interest income, exchange rate gains and losses, and impairments are recognised in the income statement. Any profit or loss as a result of the removal from the balance sheet is recognised in the income statement.

Fair value recognised via comprehensive income – investment in debt instruments

These assets are subsequently valued at their fair value. Interest income is calculated using the effective interest method; exchange-rate gains and losses, and impairments are recognised in the income statement. Other net profits and losses are recognised in comprehensive income. On derecognition, the cumulated profits and losses in the comprehensive income are reclassified to the income statement.

Fair value recognised via comprehensive income – investment in equity instruments

These assets are subsequently valued at their fair value. Dividends are recognised as revenue in the income statement unless the dividend clearly essentially constitutes recovery of part of the costs of the investment. Other net profits and losses are recognised in comprehensive income and are never reclassified to the income statement.

The following table gives an explanation of the original measurement categories under IAS 39 and the new measurement categories under IFRS 9 for each class of financial assets in the Group as at 1 January 2018.

(in millions of euros)

| | Original classification under IAS 39 | New classification under IFRS 9 | Original carrying value under IAS 39 | Nieuw carrying value under IFRS 9 |
|------------------------------|---|--|---|--|
| Share in Eurofima | Available for sale financial assets | Fair value through other comprehensive income - investment in shares | 36 | 81 |
| Share in bonds | Available for sale financial assets | Fair value through other comprehensive income - investment in debt | 12 | 12 |
| Loans and receivables | Loans and receivables | Amortised costs | 63 | 63 |
| Financial leases | Loans and receivables | Amortised costs | 45 | 45 |
| Commodity derivatives | Derivatives - fair value | Derivatives - fair value | 1 | 1 |
| Other financial fixed assets | Loans and receivables | Amortised costs | 1 | 1 |

Under IAS 39, the share in Eurofima is measured at cost, as this interest does not have a quoted price in an active market and its fair value could not be reliably measured. No such option exists under IFRS 9 and equity investments shall be measured at fair value in accordance with IFRS 13. 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 1 January 2018 by € 45 million in favour of the fair value reserve.

Impairment of financial assets

IFRS 9 replaces the 'incurred credit loss' model in IAS 39 with an 'expected credit loss' model. The new impairment model applies to financial assets valued at amortised cost, contract assets, and investments in debt investments when the fair value is recognised via the comprehensive income, but not to investments in equity instruments. Credit losses are recognised at an earlier stage in IFRS 9 than in IAS 39. This change has not led to material adjustments to the Group's figures.

Hedge accounting

The Group has elected to continue with the hedge accounting requirements of IAS 39. As a consequence, no changes were made.

Other

The following new or amended standards have not had a significant impact on the Group's consolidated financial statements:

- Foreign currency transactions and prepayment transactions (IFRIC interpretation 22)
- Transfer of real estate (Amendments to IAS 40)
- Classification and valuation of share-based payment transactions (Amendment of IFRS 2)
- Annual IFRS improvements cycle 2014-2016
- The application of IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts (Amendments to IFRS 4)

New standards and amendments to standards that are mandatory from 2019 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 2019 or later.

The Group is currently investigating the consequences of the following new standards, interpretations and amendments to existing standards, the application of which is mandatory with effect from the 2019 financial statements, or later where specified.

IFRS 16 – Leases

On January 13, 2017, a new IFRS 16 Leases directive was published. This directive must be applied from 1 January 2019 onwards. IFRS 16 fundamentally changes the accounting of leasing contracts: the current distinction between on-balance finance and operational leasing (off-balance) is eliminated. Instead, all leases (with a single exception) are reflected on balance. This also means that the costs of operational lease contracts will be presented as depreciation costs and interest costs.

The Group has started the analysis of the impact of IFRS 16 in 2018. The application of IFRS 16 has a major impact on the balance sheet and the result of the group and results from the processing of lease contracts, which are currently operational lease contracts presented as off balance obligations. The impact of the adoption of IFRS 16 is shown below.

The Group will apply IFRS 16 from 1 January 2019, applying the adjusted retrospective approach. Therefore, the cumulative effect of the adoption of IFRS 16 as an adjustment to the opening balance sheet on January 1, 2019 is processed, without adjustment of comparative information.

For the lease contracts in Germany and the United Kingdom, the right of use of assets as of 1 January 2019 has been determined as if IFRS 16 had been applied from the start of the lease contracts based on the interest rate as at the transition date. The valuation of the right of use of assets in the Netherlands was determined on 1 January 2019 on the basis of the lease commitments as at that date. Given the recent start date of the number of large contracts in the Netherlands, processing does not differ significantly from that in Germany and the United Kingdom.

Based on the information currently available, the application of IFRS 16 with effect from 2019 is expected to lead to the recognition of a right of use of assets of € 1,756 million, lease obligations of € 1,788 and an impact on the shareholders' equity of € 26 million negative. The operating result for 2019 is expected to be approximately € 42 million higher as a result of depreciation being higher than lease payments, financing costs € 49 million higher and the

result after taxes € 4 million lower. There is no expected impact on financing covenants, as the financing covenants do not set requirements with regard to ratios that are influenced by the application of IFRS 16. This also applies to the credit rating of NS since the current lease obligations not included in the balance sheet have already been taken into account in the rating.

The disclosure of off-balance sheet commitment liabilities as at 31 December that was prepared in accordance with the requirements of IAS 17 and the expectations regarding the valuation of the right of use per 1 January 2019 in accordance with IFRS. There are substantial differences, this is mainly caused by:

- Commitments as at 31 December 2018 that relate to concluded lease contracts, whereby assets are delivered in the future, lead to the inclusion of the notes under IAS 17, but do not lead to a recognition of a right of use of assets under IFRS 16.
- Specific lease contracts in the United Kingdom classified as lease under IAS 17 but not under IFRS 16. These payments are accounted for as usage fees as from 1 January 2019.

The final impact of the application of the standard on January 1, 2019 can change, because the elaboration by NS will be finalised in 2019.

Other matters

The following new or amended standards have no significant impact on the consolidated financial statements of the Group:

- Uncertain tax positions (IFRIC interpretation 23)
- Long-term interests in associates and joint ventures (Amendments to IAS 28)
- Annual IFRS improvement cycle 2015-2017
- Plan adjustments, restrictions and regulations (Amendments to IAS 19)
- Changes in references to the conceptual framework in IFRS
- Amendments to IFRS 3 Business Combinations

Estimates and assessments

The preparation of the financial statements requires the Executive Board to make judgements, estimates and assumptions 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 has consequences for these periods.

The key estimates and assessments concern: mainly estimates of infrastructure levy and concession fees (note 7), receivables (note 17), provisions / off-balance sheet arrangements (note 30 and note 31) and valuation of deferred tax assets (note 10).

The accounting policies described below have been applied consistently to the periods presented in these consolidated financial statements.

Principles of 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 income and expenses from such transactions are eliminated. Unrealised gains arising from transactions with investments that are recognised according to 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 profits, but only insofar as there are no indications that they should be treated as an impairment.

Currency translation

Foreign currency transactions

Transactions denominated in foreign currency are converted to the functional currency of the Group entity in question at the exchange rate applying on the transaction date. Foreign currency monetary assets and liabilities are converted to the functional currency at the exchange rate applying on the balance-sheet date. Non-monetary assets and liabilities denominated in foreign currency that are assessed at fair value are converted to the functional currency using the exchange rates that applied on the dates when the fair values were determined. Non-monetary assets and liabilities denominated in foreign currency that are assessed at historical cost are not recalculated.

The exchange rate differences on conversion of the following items are recognised in the unrealised results:

- financial liabilities that are designated as a hedge of the net investment in a foreign operation
- qualifying cash-flow hedges, insofar as the hedging 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 applying at the reporting date. The revenues and costs of foreign operations are converted into euros at an average exchange rate that approximates to the exchange rate on the transaction date.

Currency conversion differences are included in the unrealised results and recognised in the translation reserve. If the sale of a foreign operation means that the Group ceases to exercise control, significant influence or joint control, then the cumulative amount in the translation reserve associated with that foreign operation will be transferred to the income statement when the profit or loss from the sale is recognised. If the Group only sells part of its interest in a subsidiary, while retaining control, then 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, then a proportionate share of the cumulative amount will be transferred 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.

Property, plant and equipment

The fair value of property, plant and equipment recognised as a result of a business combination is based on market values. The fair value is calculated on the basis of up-to-date purchase prices, or is determined by the historic cost, using an index to convert to current prices.

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 indications of impairment applies. The fair value is expected to be greater than the carrying amount of the investment property.

Investments in bonds and deposits

The fair value of investments in bonds is determined using the price on the reporting date. The fair value of share in Eurofima has determined on 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 agreements.

Leasing

Operating lease payments

Lease agreements in which none or virtually none of the benefits and disadvantages associated with ownership lie with the lessee are designated operating leases. Operating lease payments are recognised in the income statement during the lease period using the straight-line method.

Finance lease payments

Lease agreements in which all or virtually all of the benefits and disadvantages associated with ownership lie with the lessee are designated 'finance leases'. The minimum lease payments are recognised partly as financing costs and partly as repayments of the outstanding liability. The financing costs are attributed to the individual periods comprising the total lease term in such a way that this results in a constant interest rate for the remaining balance of the liability.

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 income or expenses during the financial year.

Section 2 Result for the year

1. Revenue

In the following table the revenues are broken down into a combination of transport type and geographic area.

| (in millions of euros) | 2018 | 2017 |
|--|--------------|--------------|
| Train-related transport in the Netherlands | 2,510 | 2,425 |
| Bus-related transport in the Netherlands | - | 129 |
| Station development and operation in the Netherlands | 592 | 578 |
| Train-related transport in the United Kingdom | 2,248 | 1,527 |
| Bus-related transport in the United Kingdom | 219 | 216 |
| Train-related transport in Germany | 357 | 246 |
| Total revenue | 5,926 | 5,121 |

Station development and operation in the Netherlands includes an amount of €27 million (2017: €23 million) relating to development activities.

The increase in revenue from train-related transport in the United Kingdom is mainly due to the West Midlands concession that was started in December 2017. The revenue 2017 bus-related transport in the Netherlands comes from the Qbuzz entity, which was disposed of as at 31 August 2017.

Accounting policies

Revenue

Revenue is recognised on the basis of the fee established in a contract with a customer. The Group recognizes 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 sales tax.

Provision of services and sale of goods

Revenue from the sale of travel rights is recognised when the travel right arises. Revenue from subscriptions is recognised over time and spread over the period in the profit and loss account over the validity of the subscription period.

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, the associated costs or any returns of goods can be estimated reliably. Government or similar fees arising from transport contracts or concessions 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, with it being recognised over the term of the lease. Commitment costs incurred as an incentive to enter into lease agreements 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) | 2018 | 2017* |
|--|--------------|--------------|
| Wages and salaries | 1,629 | 1,488 |
| Social security contributions | 205 | 209 |
| Contributions to defined contributions plans | 107 | 97 |
| Contributions to defined benefit plans | 32 | 24 |
| Other staff costs | 82 | 69 |
| Staff hired | 111 | 146 |
| Total | 2,166 | 2,033 |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1

The average workforce was as follows.

| (in fte) | 2018 | 2017 |
|--------------|---------------|---------------|
| Netherlands | 18,734 | 19,897 |
| UK | 12,936 | 10,402 |
| Germany | 1,657 | 1,105 |
| Total | 33,327 | 31,404 |

For the Netherlands, the average number of Qbuzz employees for 2017 is included at 1,139 FTEs.

The workforce as at the financial year-end was as follows.

| (in fte) | 2018 | 2017 |
|--------------|---------------|---------------|
| Netherlands | 18,381 | 18,805 |
| UK | 13,162 | 12,785 |
| Germany | 2,028 | 1,447 |
| Total | 33,571 | 33,037 |

Remuneration of the Executive Board

| (in euro's) | Fixed salary | Alternative for the gap on pension accrual | Payment lease amounts | Compensation fiscal treatment executive car | Various allowances | Pension expenses | Total 2017 |
|-------------------------|------------------|--|-----------------------|---|--------------------|------------------|------------------|
| Mr. R.H.L.M. van Boxtel | 449,944 | 41,524 | - | 13,662 | 4,368 | 14,431 | 523,929 |
| Mr. H.L.L. Groenewegen | 352,898 | 29,878 | 15,720 | 3,540 | 4,584 | 14,431 | 421,051 |
| Mrs. M.E.F. Rintel | 352,898 | 32,368 | 2,784 | 3,540 | 4,368 | 14,431 | 410,389 |
| Mrs. S.M. Zijderveld | 352,898 | 29,878 | 15,720 | 3,540 | 4,368 | 14,431 | 420,835 |
| Mr. T.B. Smit | 265,178 | 22,523 | - | 2,655 | 3,276 | 10,823 | 304,455 |
| Total | 1,773,815 | 156,172 | 34,224 | 26,937 | 20,963 | 68,547 | 2,080,658 |

| (in euro's) | Fixed salary | Alternative for the gap on pension accrual | Payment lease amounts | Compensation fiscal treatment executive 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 |
| Mrs. M.E.F. Rintel | 361,014 | 33,272 | 2,784 | 2,738 | 4,368 | 14,677 | 418,852 |
| Mrs. S.M. Zijderveld | 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 |
| Total | 1,904,350 | 168,036 | 36,624 | 22,045 | 21,840 | 73,385 | 2,226,280 |

Please refer to the chapter 'Remunerations of the Executive Board' in the annual report for more details on the remuneration policy for the Executive Board.

Remuneration of key management personnel (excluding the Executive Board)

| (in euro's) | Fixed and variabel remuneration | Pension expenses | Termination benefits (excluding compensation legal expenses) | Total |
|-------------|---------------------------------|------------------|--|-----------|
| 2017 | 2,558,381 | 98,835 | - | 2,657,216 |
| 2018 | 2,346,038 | 125,964 | - | 2,472,002 |

Remuneration of the Supervisory Board

The remuneration of members of the Supervisory Board for 2018 paid by the company totalled €226,053 (2017: €205,371). The remuneration consists of a fixed fee and an allowance for participating in one or more committees. The specification of the amounts for each member of the Supervisory Board is as follows.

| (in euro's) | 2018 | 2017 |
|---|----------------|----------------|
| G.J.A. van de Aast <i>Chairman Supervisory Board , member risk and auditcommittee, member remuneration and nomination committee</i> | 45,624 | 44,344 |
| J.J.M. Kremers <i>Chairman risk and audit committee</i> | 37,734 | 36,673 |
| P. Rosenmöller <i>Chairman remuneration and nomination committees, member risk and audit committee (from 1. July 2018) and vice chairman Supervisory Board</i> | 44,778 | 42,189 |
| M.E. van Lier Lels <i>member risk and audit committee</i> | 32,327 | 31,420 |
| J.L. Stuijt <i>member remuneration and nomination committee and member risk and auditcommittee (from 1. May 2018)</i> | 34,146 | 31,420 |
| W.J. van der Feltz <i>(from 1. May 2017), member risk- en auditcommissie (from 1. May 2018)</i> | 31,444 | 19,325 |
| Totaal | 226,053 | 205,371 |

The 2018 allowances for the various functions (excluding expenses) are as follows:

| (in euro's) | 2018 |
|---|--------|
| Voorzitter RvC | 37.840 |
| Vice voorzitter RvC | 33.516 |
| Lid RvC | 28.110 |
| Voorzitter risk- en auditcommissie | 8.108 |
| Lid risk- en auditcommissie | 2.703 |
| Voorzitter remuneratie- en nominatiecommissie | 8.108 |
| Lid remuneratie- en nominatiecommissie | 2.703 |

The company has not extended any loans, advances or guarantees to members of the Executive Board or the Supervisory Board.

All the 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) | 2018 | 2017 |
|---|------------|------------|
| Depreciation of property, plant and equipment | 291 | 301 |
| Depreciation of investment property | 8 | 9 |
| Amortisation of intangible assets | 62 | 45 |
| | 361 | 355 |
| Total depreciation and amortisation | | |
| Impairment (and reversal of impairments) of property, plant and equipment | - | 9 |
| Impairment investment property | - | 5 |
| Impairment intangible assets | - | - |
| Total (reversal of) impairment losses | - | 14 |
| Total | 361 | 369 |

For an explanation of the impairments of non-current assets, please refer to note 14.

4. Use of raw materials, consumables and inventories

| (in millions of euros) | 2018 | 2017 |
|------------------------|------------|------------|
| Materials | 328 | 321 |
| Energy | 199 | 184 |
| Total | 527 | 505 |

5. Own capitalised production

The own capitalised production in 2018 of €154 million (2017: €161 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 miljoenen euro's) | 2018 | 2017 |
|----------------------------|------------|------------|
| Kosten van uitbesteed werk | 113 | 73 |
| Schoonmaakkosten | 100 | 95 |
| Onderhoudswerkzaamheden | 123 | 122 |
| Automatiseringskosten | 183 | 185 |
| Totaal | 519 | 475 |

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 levy and franchise fees

| (in millions of euros) | 2018 | 2017 |
|--------------------------|--------------|------------|
| Dutch trainconcessions | 394 | 381 |
| English trainconcessions | 741 | 443 |
| German trainconcessions | 145 | 106 |
| Total | 1,280 | 930 |

The infrastructure levy and franchise fees for the UK rail franchises contains an amount of €41 million (2017: nil) relating to the Central London Employment (CLE) mechanism which is included in the Greater Anglia franchise agreement with the Department for Transport (DfT). Of the total recorded CLE impact in 2018, an amount of € 19 million relates to prior years. The Greater Anglia franchise faces the implications of the DfT's imposition of the CLE mechanism which has been set out earlier. Intended to provide the franchise protection against the risk of external economic factors having an impact on passenger revenues, the CLE mechanism is predicated on an assumed correlation between growth in central London employment levels and passenger growth with corresponding revenue growth. However, it is now clear that this

correlation does not exist –due to changes in working travel patterns and growth in home working. As a result Greater Anglia, like other franchises in the London area, is facing a potentially further payment to the DfT for supposedly growth in CLE, without a corresponding rise in passenger numbers and revenues. Work is still ongoing to resolve the CLE issue. The current outcome of the CLE-mechanism has a significant impact on the future profitability of Greater Anglia.

Accounting policies

Adjustment mechanisms HRN concession

The implementation agreement with the Ministry of Infrastructure and Water Management includes a number of correction mechanisms for determining the concession price. The correction relating to the average profitability during the concession 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 concession. Other (one-off) payments under the agreement are recognised on a straight-line basis over the concession term.

Adjustment mechanisms for the main rail network franchise

The implementation agreement with the Ministry of Infrastructure and Water Management contains a number of adjustment mechanisms for determining the franchise price. The adjustment related to the average profitability during the term of the franchise is recognised as a receivable when the entitlement arises according to the calculation method used (as defined in the implementation agreement). The adjustment is recognised on a straight-line basis over the franchise period. Other (one-off) payments relating to the agreements are accounted for on a straight-line basis over the franchise period.

8. Other operating expenses

'Other operating expenses' include insurance, costs of office accommodation, fixtures and fittings, auditor's fees, marketing costs, rental and lease costs for operating assets and additions to provisions.

Auditor's fees

| (in millions of euros) | 2018 | 2017 |
|-----------------------------|------------|------------|
| Statutory audits | 3.4 | 2.5 |
| Other assurance engagements | 0.3 | 0.4 |
| Tax advisory services | - | - |
| Other services | - | - |
| Total | 3.7 | 2.9 |

The auditor's fees comprise the fees both for services in the Netherlands and those for the networks abroad.

9. Income tax

| (in millions of euros) | 2018 | 2017* |
|--|------------|-----------|
| <i>Included in the income statement</i> | | |
| Current taxes | -9 | -148 |
| Deferred taxes | -56 | 143 |
| Total income tax | -65 | -5 |
| Reconciliation with effective tax rate | | |
| Profit before tax | 181 | 52 |
| Income tax at Dutch tax rate for corporation tax (2018 and 2017: 25%) | -45 | -13 |
| Non-deductible costs | -4 | -10 |
| Other permanent differences | 2 | 9 |
| Effect of the tax rate in foreign jurisdictions (different rate) | 4 | 20 |
| Reversal devaluation deferred tax asset | - | 67 |
| Changes rates deferred tax positions | -22 | - |
| Settlement previous years | - | -78 |
| Total income tax | -65 | -5 |
| Income tax on income and expenses recognised directly in equity | - | - |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1

Corporate income 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 produce 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 to deductible costs.

The effective tax burden for income tax on the result was 36% (10% in 2017). 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. No final assessments have been received yet for subsequent years. In the financial statements for this year and previous years, tax is recognised on the basis of the tax returns submitted, the underlying principles adopted in those tax returns and any adjustments to previous years.

The rates of corporate income tax for the coming years have been reduced (see note 10). The effect of the recalculation of the deferrals has led to a write-down of the deferrals for an amount of €22 million and has been recognised in the profit and loss account 2018.

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 income taxes. Income tax is recognised in the income statement, except insofar as it relates to items recognised directly in equity via the comprehensive income, in which case the tax is recognised in equity via the comprehensive income.

All taxes 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 in force 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 2017 | Recognised in income statement | Recognised in total result | Other changes | Net position per 31 December 2017 | Deferred tax assets | Deferred tax liabilities |
|--|----------------------------------|--------------------------------|----------------------------|---------------|-----------------------------------|---------------------|--------------------------|
| Property, plant and equipment | -118 | 201 | - | - | 83 | 111 | 28 |
| Intangible assets | -9 | -1 | - | -8 | -18 | - | 18 |
| Non-current financial assets | -3 | -4 | -2 | 1 | -8 | 4 | 12 |
| Receivables | - | - | - | 2 | 2 | - | -2 |
| Provisions | 1 | - | - | -2 | -1 | - | 1 |
| Deferred credits | 65 | -8 | - | 1 | 58 | 58 | - |
| Loans and other financial obligations | 4 | -1 | - | -1 | 2 | 2 | - |
| Other items | -2 | 2 | - | -1 | -1 | 1 | 2 |
| Loss compensation | 131 | -46 | - | -1 | 84 | 84 | - |
| Deferred tax assets (liabilities) | 69 | 143 | -2 | -9 | 201 | 260 | 59 |

| (in millions of euros) | Net balance as at 1 January 2018 | Recognised in income statement | Recognised in total result | Other changes | Net position per 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 obligations | 2 | -2 | - | - | - | - | - |
| Other items | -1 | 4 | - | - | 3 | 4 | 1 |
| Loss compensation | 84 | -34 | - | - | 50 | 50 | 0 |
| Deferred tax assets (liabilities) | 201 | -56 | - | 3 | 148 | 196 | 48 |

Net operating losses that are categorised as tax losses under Dutch tax law and that arose in the Dutch subsidiaries can in general be offset against future profits recorded in the nine years after the year in which the loss was suffered, and can be offset against the profit recorded in the year preceding the year of the loss. There are comparable rules for the positions in foreign enterprises.

On 31 December 2017, after coordinating matters with the relevant tax authorities, the main rail network rolling stock portfolio, which had been held by the Irish subsidiary NSFSC, was transferred to a Dutch company. This company is part of the tax group in the Netherlands.

As at 31 December 2018, the Group had deferred tax assets of €156 million for the tax group in the Netherlands (€233 million as at 31 December 2017). These deferred tax assets are partly covered by deferred tax liabilities that produce taxable profits in the reference period through to 2025 and forecast profits through to 2025, mainly based on the Concern Plan 2019-2023. The forecasts assume the current breakdown of the Group's activities, taking account of the main rail network franchise that started on 1 January 2015 and the effect of the transfer of the main rail network rolling stock portfolio from the Irish subsidiary NSFSC to the Netherlands on 31 December 2017. Given the expected profitability in the Netherlands, the deferred tax asset will be realised in 2019.

The Dutch corporate income tax rate for 2018 is 25% (2017: 25%). For the calculation of the deferred tax position of the Dutch entities, the applicable rate of 25% for 2019, 22.55% for 2020 and 20.5% for subsequent years has been used. For the calculation of the deferred tax position of the United Kingdom entities, the applicable rate of 19% for 2019 and 17% for subsequent years has 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 the carrying amount for tax purposes. 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 claiming 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 Fixed assets and investments

11. Property, plant and equipment

| (in millions of euros) | Land | Building | Other fixed installations | Rolling stock | Parts | Machinery & equipment | Assets under construction | Total |
|---|------------|------------|---------------------------|---------------|-----------|-----------------------|---------------------------|--------------|
| Composition per 1 January, 2017 | | | | | | | | |
| Cost | 168 | 750 | 144 | 6,139 | 97 | 529 | 672 | 8,499 |
| Cumulative depreciation and impairments | 30 | 320 | 114 | 3,906 | 71 | 404 | - | 4,845 |
| Carrying amount as at 1 January, 2017 | 138 | 430 | 30 | 2,233 | 26 | 125 | 672 | 3,654 |
| Changes in 2017 | | | | | | | | |
| Additions | 5 | 37 | 12 | 250 | 6 | 88 | 508 | 508 |
| Capitalisations | - | - | - | - | - | 6 | -398 | - |
| Depreciation | -3 | -26 | -7 | -236 | -3 | -26 | - | -301 |
| Exchange rate differences | - | - | - | - | - | -1 | - | -1 |
| Divestments | -2 | -1 | -1 | -1 | - | -4 | - | -9 |
| Impairments | - | -6 | - | -1 | - | -2 | - | -9 |
| Reversal impairments | - | - | - | -1 | - | - | - | -1 |
| Other changes | -14 | 15 | 3 | - | - | -4 | -2 | -2 |
| Total changes | -14 | 19 | 7 | 11 | 3 | 57 | 108 | 191 |
| Composition per 31 December 2017 | | | | | | | | |
| Cost | 156 | 780 | 153 | 6,315 | 97 | 603 | 780 | 8,884 |
| Cumulative depreciation and impairment | 32 | 331 | 116 | 4,071 | 68 | 421 | - | 5,039 |
| Carrying amount as at 31 December 2017 | 124 | 449 | 37 | 2,244 | 29 | 182 | 780 | 3,845 |
| Changes in 2018 | | | | | | | | |
| Additions | - | - | - | - | - | - | 792 | 792 |
| Capitalisations | 1 | 65 | 17 | 510 | 1 | 71 | -665 | - |
| Acquisitions | - | - | - | - | - | - | - | - |
| Depreciation | -3 | -26 | -8 | -220 | -3 | -31 | - | -291 |
| Exchange rate differences | - | - | - | - | - | -1 | - | -1 |
| Divestments | -4 | - | - | -187 | - | -3 | - | -194 |
| Impairments | - | - | - | - | - | - | - | - |
| Reversal impairments | - | - | - | - | - | - | - | - |
| Other changes | 1 | - | - | -175 | 1 | - | 1 | -172 |
| Total changes | -5 | 39 | 9 | -72 | -1 | 36 | 128 | 134 |
| Composition per 31 December 2018 | | | | | | | | |
| Cost | 154 | 839 | 167 | 6,394 | 69 | 642 | 908 | 9,173 |
| Cumulative depreciation and impairment | 35 | 351 | 121 | 4,222 | 41 | 424 | - | 5,194 |
| Carrying amount as at 31 December 2018 | 119 | 488 | 46 | 2,172 | 28 | 218 | 908 | 3,979 |

In 2018, equipment with a carrying amount of €185 million was sold to a third party and this equipment is leased (in the form of an operational lease) from that moment on. 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).

Some of the trains included in the balance sheet are up to begin 2018 covered by past cross-border lease transactions. The carrying amount of rolling stock financed by cross-border leases was €nil million as at year-end 2018 (2017: €73 million).

Collateral has been provided for Eurofima loans up to begin 2018 in the form of pledges on rolling stock (see too note 31). The carrying amount for this is €nil (2017: €4 million).

Accounting policies

Property, plant and equipment are measured at cost, less cumulative depreciation and cumulative 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 financing 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. Assets where the Group only has beneficial ownership are recognised in the balance sheet.

Gains and losses on divestment of an item of property, plant and equipment are determined by comparing the proceeds from divestment with the carrying amount of the asset and the net value is then recognised in '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 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 deliver future economic benefits. All other costs of maintaining the asset are charged to the income statement as and when they are incurred.

Depreciation

Depreciation of property, plant and equipment is 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.

Except where it is reasonably certain that the Group will be taking over ownership of a leased asset at the end of the lease period, leased assets (finance leases) are depreciated over the period of the lease agreement or the useful life (whichever is the shorter). Land is not depreciated, with the exception of street paving. The estimated useful life (depreciation term) for different types of property, plant and equipment is as follows.

| Asset type | Depreciation terms |
|----------------------|--|
| Buildings | broken down into components (15 to 100 years); on average 40 years |
| Other fixed plant | 10 to 25 years |
| Trains | 20 years |
| Buses | 6 to 15 years |
| Plant and equipments | 3 to 10 years |

The specified useful life is an average for the assets concerned and for any components of those assets.

The depreciation method, remaining useful life and residual value are assessed 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 transferred to 'investment property' or 'property, plant and equipment' respectively. Because both categories of non-current assets are measured in the same way, the transfer is at the carrying amount.

12. Investment property

(in millions of euros)

Total real estate

Composition per 1 January 2017

| | |
|---|------------|
| Cost | 306 |
| Cumulative depreciation and impairments | -109 |
| Carrying amount as at 1 January 2017 | 197 |

Changes in 2017

| | |
|----------------------|------------|
| Additions | 7 |
| Depreciation | -9 |
| Divestments | -4 |
| Impairment | -5 |
| Reversal impairment | - |
| Other changes | -16 |
| Total changes | -27 |

Composition per 31 December 2017

| | |
|---|------------|
| Cost | 304 |
| Cumulative depreciation and impairment | -134 |
| Carrying amount as at 31 December 2017 | 170 |

Changes in 2018

| | |
|----------------------|------------|
| Additions | - |
| Depreciation | -8 |
| Divestments | -8 |
| Impairments | - |
| Reversal impairment | - |
| Other changes | -3 |
| Total changes | -19 |

Composition per 31 December 2018

| | |
|---|------------|
| Cost | 282 |
| Cumulative depreciation and impairments | -131 |
| Carrying amount as at 31 December 2018 | 151 |

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 be greater than the carrying amount of the investment property.

In addition to business premises, the investment property also consists of property let to third parties or held as strategic property. The rental agreements generally include a period of several years during which cancellation is not possible. Renewal of the agreement after this is negotiated with the tenant. The overall contractual rent up to the end of the rental contracts was in 2018 around €208 million. No contingent rent is charged.

The direct rental income was €30 million (2017: €32 million). The direct rental costs comprise maintenance costs, property taxes and direct management costs, totalling €7 million (€9 million in 2017).

Accounting policies

Investment property includes property held in order to earn rental income or an appreciation in value, or both. Investment property is measured at cost, less cumulative depreciation and cumulative 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 financing 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 deliver future economic benefits. All other costs of maintaining the asset are charged to the income statement as and when they are incurred.

Depreciation

Depreciation of investment property is 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 (depreciation term) for different types of investment property is as follows.

| Asset type | Depreciation terms |
|---------------------------------|--------------------|
| 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 those assets. The depreciation method, remaining useful life and residual value are reviewed each year.

13. Intangible non-current assets

| (in millions of euros) | Goodwill | Software | Total |
|---|-----------|------------|------------|
| Composition per 1 January 2017 | | | |
| Cost | 20 | 469 | 489 |
| Cumulative depreciation and impairment | - | 232 | 232 |
| Carrying amount as at 1 January 2017 | 20 | 237 | 257 |
| Changes in 2017 | | | |
| Additions | - | 103 | 103 |
| Acquisitions | 18 | 28 | 46 |
| Depreciation | - | -45 | -45 |
| Divestments | - | - | - |
| Impairment | - | - | - |
| Reversal impairment | - | - | - |
| Other changes | - | -4 | -4 |
| Total changes | 18 | 82 | 100 |
| Composition per 31 December 2017 | | | |
| Cost | 38 | 604 | 642 |
| Cumulative depreciation and impairment | - | 285 | 285 |
| Carrying amount as at 31 December 2017 | 38 | 319 | 357 |
| Changes in 2018 | | | |
| Additions | - | 117 | 117 |
| Acquisitions | - | - | - |
| Depreciation | - | -62 | -62 |
| Divestments | - | - | - |
| Impairments | - | - | - |
| Reversal impairment | - | - | - |
| Other changes | - | 4 | 4 |
| Total changes | - | 59 | 59 |
| Composition per 31 December 2018 | | | |
| Cost | 38 | 725 | 763 |
| Cumulative depreciation and impairment | - | 347 | 347 |
| Carrying amount as at 31 December 2018 | 38 | 378 | 416 |

The increase in the goodwill in 2017 relates to the increase in the stake in WestfalenBahn from 25% to 100%. 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. The goodwill is the difference between the cost of the acquisition and the fair value of the identifiable assets and liabilities on the date on which they are acquired. Goodwill is measured at cost less cumulative impairment.

Negative goodwill from an acquisition is taken directly to the income statement.

Other intangible non-current assets

Other intangible non-current assets with a limited useful life and acquired or produced by the Group are recognised at cost less cumulative amortisation and cumulative impairment.

Subsequent to initial recognition, expenditure on capitalised intangible non-current assets is only capitalised if it leads to an increase in the future economic rewards associated with 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 non-current 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 the impairments and their reversals are based on a weighted average post-tax discount rate of 5% (2017: 6%). Changes in the assumptions have not resulted in any deviation in the calculated amounts.

Accounting policies

The carrying amount of the Group's non-current assets is reviewed every reporting date in order to determine whether there are grounds for impairments. If such grounds are found, an estimate is made of the recoverable amount of the asset in question. For goodwill and intangible non-current 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 net of selling costs. 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 assessments, assets are grouped together into the smallest group of assets that generates cash flows from continuing use that are largely independent of other assets or groups of assets (the 'cash-generating unit'). In impairment assessments, 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 its cash-generating unit 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 recognised using the equity method

The investments that are recognised according to the equity method have a carrying amount of €17 million (2017: €26 million). The financial data for these investments is as follows.

| Name entity (in millions of euros) | Merseyrail Ltd | Other joint ventures | Total joint ventures | Other associates | Total |
|--|----------------|----------------------|----------------------|------------------|-----------|
| Share percentage | 50.00% | | | | |
| 2017 | | | | | |
| Current assets | 51 | 29 | | 17 | |
| of which cash and cash equivalents | 40 | 25 | | 10 | |
| Non-current assets | 6 | 2 | | 6 | |
| Current liabilities | 43 | 7 | | 11 | |
| of which current financial liabilities | - | - | - | 1 | |
| Non-current liabilities | - | - | | - | |
| of which non-current financial liabilities | - | - | | - | |
| Net equity (based on 100%) | 13 | 22 | | 12 | |
| Carrying value investments in investees recognised using the equity method | 7 | 12 | 19 | 7 | 26 |
| Revenue | 174 | 29 | | 34 | |
| Depreciation, amortisation and impairment | 2 | - | | 4 | |
| Result from operating activities | 21 | 10 | | - | |
| Finance income | - | - | | - | |
| Finance expense | - | - | | - | |
| Income tax expense | 5 | 1 | | - | |
| Result for the period | 21 | 10 | | - | |
| Total comprehensive income over the period | 21 | 8 | | 1 | |
| Share in result of investees recognised using the equity method | 12 | 4 | 16 | 4 | 20 |
| Share in other comprehensive income | - | - | - | - | - |
| Share in total comprehensive income of investees recognised using the equity method | 12 | 4 | 16 | 4 | 20 |
| Dividend received | 10 | 10 | 20 | 2 | 22 |

| Name entity (in millions of euros) | Merseyrail Ltd | Other joint ventures | Total joint ventures | Other associates | Total |
|--|----------------|----------------------|----------------------|------------------|-----------|
| Share percentage | 50.00% | | | | |
| 2018 | | | | | |
| 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 | |
| Carrying value investments in investees recognised using the equity method | 8 | 2 | 10 | 7 | 17 |
| Revenue | 183 | 7 | | 34 | |
| Depreciation, amortisation and impairment | 2 | - | | 3 | |
| Result from operating activities | 25 | 2 | | - | |
| Finance income | - | - | | - | |
| Finance expense | - | - | | - | |
| Income tax expense | 4 | - | | - | |
| Result for the period | 20 | 2 | | - | |
| Total comprehensive income over the period | 20 | 1 | | 1 | |
| Share in result of investees recognised using the equity method | 11 | 3 | 14 | - | 14 |
| Share in other comprehensive income | - | - | - | - | - |
| Share in total comprehensive income of investees recognised using the equity method | 11 | 3 | 14 | - | 14 |
| Dividend received | 11 | 3 | 14 | - | 14 |

Interests in joint ventures

Merseyrail Services Holding Company Ltd and Northern Rail Holdings Ltd

The Merseyrail franchise and Northern Rail franchise (2017) are operated under 50/50 joint arrangements with Serco, a listed British company. NS and Serco have joint control, each with a 50% financial interest in the holding entities. The franchises are held by independent entities in which the holding company in question has a 100% interest. The profits from the holding companies are distributed to NS and Serco in equal shares.

As regards the investments that have been recognised according to 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, 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 whereby the Group shares in the control and in which the Group has rights with respect to the net assets of the venture rather than rights with respect to the (gross) 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 valued at cost upon initial recognition. The cost of the investment includes the transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share in the realised and unrealised results of the investments accounted for according to 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) | December 31, 2018 | December 31, 2017 |
|-------------------------------------|----------------------|----------------------|
| Maintenance materials | 141 | 133 |
| Projects under construction, unsold | 2 | 8 |
| Trade goods | 26 | 20 |
| Total | 169 | 161 |

The inventories of maintenance materials consist of raw materials and other materials for the production and maintenance of semi-finished and finished products for the maintenance centres. In 2018, the write-down of inventories to the net realisable value, which was recognised as an expense, amounted to €18 million (€10 million in 2017). The cumulative impairment, after withdrawals, came to €104 million at the end of 2018 (€97 million at year-end 2017).

Accounting policies

Inventories are stated at the lesser of cost and the net realisable value. The net realisable value is the estimated sales price in the normal conduct of business, less the estimated cost of completion and the cost of sales.

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) | December 31, 2018 | December 31, 2017 |
|--|----------------------|----------------------|
| Receivables from clients from projects in progress | - | - |
| Trade receivables | 305 | 246 |
| Unbilled revenue | 268 | 208 |
| Other taxes and social security charges | 42 | 26 |
| Other receivables | 215 | 168 |
| Total | 830 | 648 |

'Trade and other receivables' includes the sum of €8 million (€3 million in 2017) that concerns related parties (ProRail and the Dutch national government).

Abellio ScotRail has an outstanding receivable on Network Rail with respect to the infrastructure works around Glasgow Queen Street Station in 2016, which still has an adverse impact on passenger numbers and revenue. Discussions are still ongoing with Network Rail about the compensation to be received for lost revenues. Part of the compensation has been received in 2017. As per 31 December 2018 Abellio ScotRail recorded a receivable for further compensation to be received. The receivable has been calculated in cooperation with a third party expert, but still contains a significant estimation uncertainty.

The ageing of trade receivables as at the reporting date was as follows.

| (in millions of euros) | December 31, 2018 | | December 31, 2017 | |
|-----------------------------|----------------------|--------------|----------------------|--------------|
| | Gross | Provided for | Gross | Provided for |
| Not past due | 198 | - | 206 | - |
| Past due 0-30 days | 86 | - | 23 | - |
| Past due 31-120 days | 17 | 1 | 14 | - |
| Past due 121-180 days | 1 | - | 3 | 1 |
| Past due 181-360 days | 2 | 1 | 1 | 1 |
| Past due more than one year | 4 | 1 | 3 | 2 |
| Total | 308 | 3 | 250 | 4 |

Impairment losses

The movement in the provision for impairments of trade receivables during the year was as follows.

| (in millions of euros) | 2018 | 2017 |
|----------------------------------|----------|----------|
| Balance as at 1 January | 4 | 6 |
| Additions | 4 | 1 |
| Use | -3 | -2 |
| Release | -2 | -1 |
| Balance as at 31 December | 3 | 4 |

Accounting policies

The trade and other receivables are stated at fair value (plus any directly attributable transaction costs) upon initial recognition. Subsequent to 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 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 have been incurred but not yet 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.

Projects in progress commissioned by third parties

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|--|----------------------|----------------------|
| Costs of work in progress | - | 9 |
| Realised gains and losses | - | - |
| | - | 9 |
| Less: billed instalments | - | 9 |
| | - | - |
| Presented under: | | |
| Receivables from clients for projects in progress | - | - |
| Advance payments received for projects in progress | - | - |

The trade and other payables are specified in note 21.

Accounting policies

Projects in progress commissioned by third parties are stated at cost plus profit taken as at the balance sheet date, less a provision for anticipated losses and less invoiced instalments in proportion to the progress of the project. 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 expenses incurred (including the recognised profit or loss) exceeds the sum of the invoiced instalments. If the sum of the costs incurred (including the recognised profit or loss) is less than the sum of the invoiced instalments, the item is classified as a liability.

Contractual revenue and expenses arising from projects in progress commissioned by third parties are accounted for in the income statement in proportion to the stage of completion of the project. The stage of completion is determined by ascertaining the costs of the work done 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 projects are recognised immediately and in full in the income statement.

18. Assets and liabilities held for sale

On 2 October 2018, the group took the decision to dispose of the company DISA Assets Ltd and at that time stopped the depreciation of the assets in the company. The sale is expected to be completed in the course of 2019. Assets held for sale are measured at book value, since the fair value less costs to sell is not lower than this book value.

The assets and liabilities held for sale as at 31 December 2018 comprise:

| (in millions of euros) | December 31, 2018 |
|--------------------------------------|----------------------|
| Property plant and equipment | 174 |
| Trade and other receivables | 13 |
| Cash and cash equivalents | 4 |
| Assets held for sale | 191 |
| Interest rate swaps used for hedging | 5 |
| Trade payables and other liabilities | 1 |
| Liabilities held for sale | 6 |

19. Cash and cash equivalents

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|------------------------|-------------------|-------------------|
| Cash and bank balances | 906 | 565 |

The cash and bank balances are at the free disposal of the company, with the exception of €155 million (€101 million as at 31 December 2017). 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

Accruals and deferred income as at 31 December 2018 amount to €42 million (31 December 2017: €42 million). The accruals include the non-current part of the outstanding pension contributions for employees (€10 million, compared with €21 million as at 31 December 2017) due to the new 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.

Accruals and deferred income include funds received in connection with the FENS agreement. At the end of 2012, as a result of the effect of the addendum to the FENS framework agreement, NS had a amount received. The total outstanding liability (€ 32 million) has been disbursed through project decisions. For the part that has a term of more than one year, a sum of € 20 million is included under accruals and deferred income.

21. Trade and other payables

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|--|----------------------|----------------------|
| Advance payments received for work in progress | - | 1 |
| Trade payables | 406 | 287 |
| Current portion of deferred credits | 40 | 40 |
| Other taxes and social security charges | 119 | 106 |
| Other liabilities | 484 | 424 |
| Accrued expenses and deferred income | 266 | 247 |
| Total | 1,315 | 1,105 |

The 'Trade and other payables' item includes an amount of €9 million (€7 million in 2017) that concerns related parties (ProRail and the Dutch national 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 for work in progress' item, see note 17.

22. Deferred income

The deferred income of €694 million (2017: €246 million) consists largely of season ticket payments received in advance. The increase is caused by the advance payments received for the 2019 student card received at the end of 2018.

Accounting policies

This income concerns amounts received in one go under agreements with terms extending to future years. The proceeds are credited to the income statement over the term of the agreements to which they relate. The proceeds are 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) | December 31, 2018 | December 31, 2017 |
|--|----------------------|----------------------|
| Other non-current financial assets, including investments | | |
| Share in Eurofima | 81 | 36 |
| Share in bonds | 28 | 12 |
| Loans and receivables | 6 | 63 |
| Financial leases | 41 | 45 |
| Commodity derivatives | 2 | 1 |
| Other investments | 1 | 1 |
| Total | 159 | 158 |

Term deposits and bonds (included in share in bonds) are held in part for the payment of the capital expenditure commitments of €1,377 million.

Under IAS 39, the share in Eurofima is measured at cost, as this interest does not have a quoted price in an active market and its fair value could not be reliably measured. No such option exists under IFRS 9 and equity investments shall be measured at fair value in accordance with IFRS 13. 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 1 January 2018 by € 45 million in favour of the fair value reserve.

Accounting policies (per 1 January 2018)

On initial recognition, loans, receivables and deposits are included by the Group from the date on which they first arose. All other financial assets are first recognised on the transaction date. The Group no longer recognises 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 benefits associated with 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, then that interest is included as a separate asset or liability.

The Group ceases recognition of a financial liability in the balance sheet once the contractual obligations have been fulfilled or cancelled or have expired. Financial assets and liabilities are netted and the resulting net amount recognised in the balance sheet only if the Group has a legally enforceable entitlement to netting and if it intends to net the amounts or to realise the asset and 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. Subsequent to initial recognition, non-derivative financial instruments are measured as described below.

Financial assets in the case of fair value through profit or loss

These assets are subsequently carried 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 carried 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 profit or loss - debt investment

These assets are subsequently carried 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 recognised through other comprehensive income - equity investment

These assets are subsequently carried 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, a financial asset is assessed to determine whether there is objective evidence that it may be impaired on the basis of expected credit losses. A financial asset is impaired if there is objective evidence that one or more events has/have had a negative effect 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 'fair value through profit or loss' is calculated on the basis of the fair value.

Important financial assets 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 impairment loss.

An impairment loss is reversed only to the extent that it relates to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost and fair value through profit or loss - debt investment, the reversal is credited to the income statement.

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 2018 and 31 December 2017 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 for 2017 and the profit appropriation were determined in the shareholders' meeting of 27 February 2018. In accordance with the proposal, a sum of €24 million from the profit over the reporting period of €16 million was added to the reserves and a sum of €8 million was paid out as a dividend.

The movements in the other reserves were as follows.

| (in millions of euros) | Translation reserve | Hedging reserve | Fair value reserve | Actuarial reserve | Revaluation reserve for associates | Total other reserves |
|---|---------------------|-----------------|--------------------|-------------------|------------------------------------|----------------------|
| Balance as at 1 January 2017 | -11 | -7 | - | 29 | 24 | 35 |
| Effect change of accounting policy | | | - | -30 | -9 | -39 |
| Revised balance as at 1 January 2017 | -11 | -7 | - | -1 | 15 | -4 |
| Other comprehensive income | -3 | 3 | | 1 | - | 1 |
| Balance as at 31 December 2017 | -14 | -4 | - | - | 15 | -3 |
| Changes due to application of IFRS 9 | | | 45 | | | 45 |
| Balance as at 1 January 2018 | -14 | -4 | 45 | - | 15 | 42 |
| Other comprehensive income | - | -3 | | - | - | -3 |
| Other changes | - | | - | - | - | - |
| Balance as at 31 December 2018 | -14 | -7 | 45 | - | 15 | 39 |

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 €106 million of the net profit of €69 million to the general reserves and to distribute the remaining €37 million as dividend.

Minority interest third parties

Minority interests include minority interests as at 31 December 2018 in the equity of the group company Abellio Westmidlands Ltd.

Accounting policies

Translation reserve

The translation reserve covers all exchange-rate differences arising as a result of the conversion of the financial statements of foreign operations, as well as the conversion 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 recognised in other comprehensive income until such time as the investment is no longer recognised in the balance sheet.

Actuarial reserve

The actuarial reserve refers 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 associates' equity in accordance with the equity method.

General reserve

The recognition in equity is after deduction of taxes. Dividends are included in the period over 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 stipulations for the Group's interest-bearing loans and other financial liabilities that are measured at amortised cost.

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|--------------------------------------|----------------------|----------------------|
| Non-Current liabilities | | |
| Private loans | 652 | 465 |
| Finance lease liabilities | 44 | 32 |
| Other financial liabilities | 42 | 48 |
| Interest rate swaps used for hedging | - | 2 |
| Commodity derivatives | 2 | 4 |
| Total | 740 | 551 |
| Current liabilities | | |
| Private loans | 72 | 181 |
| Finance lease liabilities | 2 | 1 |
| Current accounts banks | 22 | 19 |
| Commodity derivatives | 2 | - |
| Total | 98 | 201 |
| Total liabilities | 838 | 752 |

The 'Private loans' item includes a debt payable by the Group to the Ministry of Infrastructure and Water Management of €180 million (2017: €213 million) associated with the deferred payments of franchise fees. Of that sum, €147 million has been included under 'Non-current liabilities', for the portion that is due to be paid after 2018. The portion that will be paid in 2019 (€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 2018 and 2029 and interest rates ranging from 0.8% to 1.5%.

The finance lease liabilities have a gross liability of €51 million and an applicable actuarial interest rate between 2% and 6%. The Group's liquidity risks, currency risks and interest rate risks associated with the loans and other financial liabilities are explained in more detail in note 26.

The reconciliation of changes in liabilities resulting from financing activities is as follows.

Loans and borrowings, including derivatives

| (in millions of euros) | Private loans | Finance lease liabilities | Current accounts banks | Other financial liabilities | Interest rate swaps used for hedging | Commodity derivatives | Total |
|---|---------------|---------------------------|------------------------|-----------------------------|--------------------------------------|-----------------------|------------|
| Balance as at 1 January 2017 | 314 | 47 | - | - | 3 | 6 | 370 |
| Dividend paid to shareholders | - | - | - | - | - | - | - |
| Repayment of loans | -118 | - | - | - | -1 | -2 | -121 |
| Addition of loans | 450 | - | - | 46 | - | - | 496 |
| Total net cash from financing activities | 332 | - | | 46 | -1 | -2 | 375 |
| Movements due to discounting | - | - | - | 2 | - | - | 2 |
| Movements working capital | - | - | 19 | - | - | - | 19 |
| Other movements | - | -14 | - | - | - | - | -14 |
| Balance as at 31 December 2017 | 646 | 33 | 19 | 48 | 2 | 4 | 752 |
| Dividend paid to shareholders | - | - | - | - | - | - | - |
| Repayment of loans | -431 | - | - | - | - | - | -431 |
| Addition of loans | 504 | - | - | - | - | - | 504 |
| Total net cash from financing activities | 73 | - | - | - | - | - | 73 |
| Movements due to discounting | - | - | - | - | - | - | - |
| New financial leases | - | 13 | - | - | - | - | 13 |
| Movements working capital | - | - | 3 | - | - | - | 3 |
| Other movements | 5 | - | - | -6 | -2 | - | -3 |
| Balance as at 31 December 2018 | 724 | 46 | 22 | 42 | - | 4 | 838 |

Accounting policies

Non-derivative financial instruments

On initial recognition, these instruments are valued at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, loans and receivables are valued 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. Derivatives are valued on initial recognition 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. Subsequent to 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, then hedge accounting is used for these derivatives. When a hedging transaction is concluded, the hedging relationship is documented. Checks are made regularly to see if the hedging transaction was effective in the past period and whether the hedging transaction is expected to be effective over the coming period. If the hedging instrument expires, is sold, terminated or exercised, or no longer satisfies the criteria for hedge accounting, then application of hedge accounting ends with immediate effect.

Cash-flow hedges

If a derivative is classified as a hedge for fluctuations in cash flows ensuing from a certain risk associated with a recognised asset or liability, or because an extremely likely expected transaction could affect the profit or loss, then the effective portion of the changes in the fair value of the derivative is recognised in the unrealised results 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 accrued amount is transferred to the income statement in the same period in which the hedged position affects the income statement.

Fair value of 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, then hedge accounting is discontinued prospectively. The cumulative profit or cumulative loss that was previously recognised in equity remains part of the equity until the expected transaction has taken place. The amount recognised in equity is transferred to the income statement (with the net change in the fair value of the cash-flow hedges transferred 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 the exchange-rate gains and losses.

Hedging energy costs

The Group uses accrual accounting for commodity derivatives intended for its own use, claiming the exception allowed by IAS 39.5 insofar as the stipulations of IAS 39.5 are met. This is applicable to purchases of diesel and fuel oil and energy in the Netherlands and is explained in the section on risks and in 'Off-balance-sheet commitments'. The other commodity derivatives that do not meet the criterion of being intended for the Group's own use are valued 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

- Price risk for energy
- Credit risk
- Liquidity risk
- Insurance risks

Risk management framework

The Executive Board bears the final responsibility for setting up and monitoring the Group's risk management framework. The Risk and Audit Committee and the Supervisory Board make sure 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 the proper control of all the 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 the market conditions and the Group's activities. Financial risk management is one element of the NS risk framework.

In order to ensure appropriate 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 through Abellio in transport franchises abroad (the United Kingdom and Germany). 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 consequently the NS risk framework.

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 with the best possible 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 drawn loans is based on a fixed rate of interest. When determining the interest-rate risk on drawn loans, 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 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) | December 31, 2018 | December 31, 2017 |
|---|----------------------|----------------------|
| Assets/liabilities with a variable interest rate | | |
| Financial liabilities | - | - |
| Effects interestswaps | - | - |
| | - | - |
| Assets/liabilities with a fixed interest rate | 830 | 744 |
| Financial liabilities | - | - |
| Effects interestswaps | 830 | 744 |
| Financial assets | | |
| Assets/liabilities with a fixed interest rate | 74 | 97 |
| Assets/liabilities with a variable interest rate | 906 | 565 |

In 2016, the Group concluded a number of forward starting interest swaps to hedge the interest-rate risk of future financing of rolling stock for a foreign franchise (cash-flow hedge accounting). The underlying value of the forward contracts was €130 million and the associated loans are expected to be arranged as of year-end 2018. As at 31 December 2018, the carrying amount of this instrument is €5 million negative. These forward starting swaps are included in Liabilities held for sale (note 18).

The Group has no floating rate GBP financial liabilities, therefore any changes in interest rates due to the Brexit have no impact on the Group.

Currency risk

The Group is exposed to currency risks on purchases, trading activities, cash and cash equivalents, drawn loans, 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 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 in 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 in the case of a functional currency other than the euro are only hedged if the Group expects to terminate the business activities. The currency results for the regular balance-sheet items in the value of the participating interest are recognised in equity through the statutory translation reserve.

At the end of 2018 and 2017, no materially significant positions were held in currencies other than the functional currency of the business units concerned.

At the end of 2018, the Group entered into a number of forward contracts in order to hedge specific currency positions. The nominal value of the hedged positions as at the end of 2018 was €181 million (€44 million at year-end 2017). The fair value of these currency derivatives at the end of 2018 was €1 million (year-end 2017: €1 million).

Brexit

On 23 June 2016, the British voted to leave the European Union (EU) (Brexit). In March 2017, the United Kingdom submitted the official notification of its intention to withdraw from the EU under Article 50. This marked the start of a two-year negotiation period on the conditions for leaving the EU. If no agreement is reached before 29 March 2019, all EU private and secondary legislation will no longer apply to the UK and the UK will become a 'third party' country.

Uncertainties regarding the impact of the Brexit may cause movements in the exchange rate of the British Pound. In accordance with its risk management policy, the Group has not hedged this currency risk on the value of the GBP investments.

The Brexit has no direct influence on the activities in the United Kingdom from a legal point of view, and a 'No-Deal' situation will have no influence on the required licences, etc. The Brexit has no direct influence on the activities in the United Kingdom from a legal point of view, and a 'No-Deal' situation will have no influence on the required licences, etc. There are potential implications of the Brexit for the smooth import of new trains and spare parts and in the event of a decline in economic growth that has an impact on revenues and profitability. In the case of a no-deal Brexit, the value of GBP and economic growth could further decline. Contractual and other measures have been taken to limit the risk.

Sensitivity analysis for foreign currencies

Given that no materially significant items in financial instruments were held in foreign currencies at the end of 2018 or the end of 2017, a change in the value of the euro with respect to a foreign currency at the year-end will not have any material effect on equity and profits over the reporting period.

Price risk for energy

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 and by the end of 2017 the Group's traction was 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 to this, a range also applies in the year in question within which fluctuations in the volume consumed do not affect the price.
- Image risk: the contract provides for an evaluation in 2019 to assess whether the traction energy is sufficiently 'green' by then. Should this not be the case, which we neither expect nor want, then the Group is entitled to terminate the contract as of 2020.

The contract complies with the 'own use' criteria and is not classified as a derivative.

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 do that, 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 31.

Sensitivity of commodity (fuel) derivatives

The sensitivity of the commodity derivatives with a carrying amount as at 31 December 2018 of €2 million negative (€4 million negative as at 31 December 2017) 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 €15 million (31 December 2014: €17 million) and equity would increase by €12 million (31 December 2017: €13 million). If the fuel price fell, 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 amount of the financial assets represents the maximum credit risk. For details of the credit risk regarding Eurofima, see note 31. The maximum exposure to credit risk at the reporting date was as follows.

| (in millions of euros) | Disclosure | December 31, 2018 | December 31, 2017 |
|-----------------------------|------------|-------------------|-------------------|
| Share in Eurofima | 23 | 81 | 36 |
| Share in bonds | 23 | 28 | 12 |
| Loans and receivables | 23 | 6 | 58 |
| Finance leases | 23 | 41 | 45 |
| Commodity derivatives | 23 | 2 | 1 |
| Other financial assets | 23 | 1 | 1 |
| Trade and other receivables | 17 | 520 | 414 |
| Cash and cash equivalents | 19 | 906 | 565 |
| Total | | 1,585 | 1,132 |

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 company. Regular checks are performed to see if 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 suffered on the investments, bonds and deposits in 2018 or 2017. 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 the rating requirements stated above from Standard & Poor's or Moody's. Investments that no longer comply with this policy are either permissible as exceptions and monitored frequently or reduced (generally through normal progression), which may mean they persist for some time after the balance-sheet date. The Group's foreign companies do not have significant long-term 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, 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% (2017: 9%) of the Group's revenues are from sales transactions with the Dutch Education Executive Agency (DUO).

As part of the credit policy used 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 the customer's 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 to settle financial liabilities using cash or other financial assets. The principles underlying liquidity risk management are that 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 losses being sustained 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 can be swiftly cashed in. The Group also has committed credit facilities including €200 million up to December 2019 and €350 million up to June 2021, plus a standing credit facility of €345 million available until May 2022.

At the end of 2018, the cash and cash equivalents (instruments that can be converted into cash in short order) comprised €1,738 million (2017: €1,131 million). The contractual financial obligations due within one year total €994 million (2017: €893 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 converted to present values.

| (in millions of euros) | December 31, 2017 | | | | | | |
|---|-------------------|------------------------|------------|-----------|-----------|------------|------------|
| | Carrying amount | Contractual cash flows | < 6 mth | 6-12 mth | 1-2 yr | 2- 5 yr | > 5 yr |
| Non-derivative financial liabilities | | | | | | | |
| Private loans | 646 | 646 | 100 | 63 | 34 | 99 | 350 |
| Finance lease liabilities | 33 | 35 | - | - | 1 | 2 | 32 |
| Current account banks | 19 | 19 | | 19 | | | |
| Other financial liabilities | 48 | 48 | - | - | 4 | 8 | 36 |
| Trade and other payables | 711 | 711 | 711 | - | - | - | - |
| Derivative financial liabilities | | | | | | | |
| Interest rate swaps used for cash flow hedging | 2 | 2 | - | 2 | - | - | - |
| Interest rate swaps used for fair value hedging | - | - | - | - | - | - | - |
| Commodity derivatives | 4 | 6 | 1 | 1 | 4 | - | - |
| Total | 1,463 | 1,467 | 812 | 85 | 43 | 109 | 418 |

| (in millions of euros) | December 31, 2018 | | | | | | |
|---|-------------------|------------------------|------------|-----------|-----------|------------|------------|
| | Carrying amount | Contractual cash flows | < 6 mth | 6-12 mth | 1-2 yr | 2- 5 yr | > 5 yr |
| Non-derivative financial liabilities | | | | | | | |
| Private loans | 724 | 724 | 21 | 50 | 58 | 196 | 399 |
| Finance lease liabilities | 46 | 46 | 1 | 1 | 3 | 6 | 35 |
| Current account banks | 22 | 22 | | 19 | | | |
| Other financial liabilities | 42 | 42 | - | - | - | - | 42 |
| Trade and other payables | 895 | 895 | 895 | - | - | - | - |
| Derivative financial liabilities | | | | | | | |
| Interest rate swaps used for cash flow hedging | 5 | 5 | 5 | | - | - | - |
| Interest rate swaps used for fair value hedging | - | - | - | - | - | - | - |
| Commodity derivatives | 4 | 5 | 1 | 1 | 3 | - | - |
| Total | 1,738 | 1,739 | 923 | 71 | 64 | 202 | 476 |

The above items have been netted off, because the contract requires the hedging transactions to be netted on settlement. 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 an agreed dividend policy with the shareholder.

Insurance risks

In the course of its operational activities, the Group is exposed to risks that can be insured. Risks beyond the scope of the business units are managed by the subsidiary NS Insurance. This refers to the risk of losses due to collisions, fire, accident and liability. 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 freely 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 2018.

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 meets this requirement comfortably. NS Insurance is fully consolidated in the Group figures.

Fair value

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.

Valuation of investments included as financial assets

For bonds, the fair value is calculated using the available current market prices/closing prices.

Valuation of derivatives

When determining the value of interest swaps and currency derivatives, the Group uses valuation methods in which all the significant data required is derived from visible market data (Level 2).

27. Net finance result

| (in millions of euros) | 2018 | 2017 |
|---|------------|------------|
| Interest income from financial assets | 1 | 1 |
| Interest income from deposits and banks balances | - | - |
| Exchange rate differences | - | 3 |
| Other interest income | 5 | 12 |
| Finance income | 6 | 16 |
| Interest expense from financial liabilities measured by amortised cost | -11 | -11 |
| Interest expenses from interest rate swaps for cash flow hedging | - | - |
| Exchange rate differences | -1 | -3 |
| Interest expenses from discounting of provisions/ other employee benefits | -1 | -2 |
| Other financial expenses | -7 | -5 |
| Finance expense | -20 | -21 |
| Net finance result included in the income statement | -14 | -5 |

In 2017, a one-off gain was realised on a release of the provision for a cross-border lease that ended at the beginning of 2018 (€ 8 million).

Accounting policies

Finance income includes the interest income from monies invested (including from financial assets), leasing income, profits from the sale of financial assets, and gains from the 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 borrowed monies, lease contracts, accrued interest on provisions and losses on hedging instruments that are recognised in the income statement. All financing 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 financing costs were capitalised in 2017 or 2018.

Financial benefits released from cross-border lease agreements 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) | December 31, 2018 | December 31, 2017 |
|---|----------------------|----------------------|
| Lump sum payments | 206 | 228 |
| Adjustment mechanism for the main rail network concession | 109 | 126 |
| Deferred credits | 315 | 354 |
| Less: current | -40 | -40 |
| Total non-current as at 31 December | 275 | 314 |

The lump-sum payment for wage increases resulting from making SPF independent in 1994 is expected to be released up to 2035, and 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 31); the amounts will be released in equal instalments and be credited to the income statement during the term of the franchise up to 2024.

Accounting policies

This income concerns amounts received in one go under agreements with terms extending to future years. The proceeds are credited to the income statement over the term of the agreements to which they relate. The proceeds are measured at amortised cost

29. Employee benefits

The non-current employee benefits comprise:

- other long-term employee benefits, including long-service awards
- obligations entailed by occupational disability and supplements to social security payments
- obligations relating to defined benefit plans

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|-----------------------------------|----------------------|----------------------|
| Defined benefit plans | 1 | 2 |
| Other long-term employee benefits | 29 | 28 |
| Total | 30 | 30 |

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.

| (number participants) | December 31, 2018 | December 31, 2017 |
|--|----------------------|----------------------|
| Railway pensionfund | 17,070 | 17,020 |
| Industry pensionfund Horeca & Catering | 2,360 | 2,837 |
| Industry pensionfund provision company | 887 | 765 |
| Additional pensionfund Servex | 108 | 93 |
| ScotRail | 4,874 | 4,713 |
| East Anglia/ Greater Anglia | 2,469 | 2,308 |
| Abellio Transport Holdings | 24 | 25 |
| Abellio London & Surrey | 1,958 | 2,041 |
| Abellio West Midlands | 2,475 | 2,475 |

In 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 pension plans have here been accounted for in these financial statements as defined contribution plans, in accordance with IFRS.

The total value of the pension contribution payments charged to the income statement in 2018 was €170 million (2017: €144 million).

Railway Pensions Fund (defined contribution plan)

The pension plan for the railway industry is administered by the Railway Pensions Fund (*Spoorwegpensioenfonds*, 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 2018, NS paid the nominal pension contribution of 24% to the pension fund. Two-thirds of the pension contributions paid to SPF are at the expense of the company and one-third at the expense of 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 will be paid in two years' time. The employees' part of the contribution build-up (one third of the amount) is included 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 through 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 size 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 character 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 in investment funds, each with a different risk and return profile.

The pension liabilities and the pension assets are based on actuarial calculations that were performed for the situation as at 31 December. At year-end 2018, the net liabilities of Abellio Transport Holdings Limited were €1 million (€2 million in 2017). 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 franchise period. The remaining amount at the end of the franchise period is not recognised in the balance sheet because it will constitute part of the debts of the next franchise holder. At year-end 2018, the net liabilities were nil (year-end 2017: nil). The average term for the companies' 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 concession holder, but will be borne by other parties after the end of the current concession period. For further details please refer to Section 1 Change in accounting policy for defined benefit plans United Kingdom

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):

| | December 31, 2018 | December 31, 2017 |
|------------------------------|-------------------|-------------------|
| Discount rate | 3.2% | 2.9% |
| Increase of salaries | 2.7% | 2.6% |
| Increase of pension benefits | 2.1% | 2.0% |
| Inflation | 2.1% | 2.0% |

Mortality table: S1NA tables with CMI 2013 projections plus long-term expectation of +1.25%.

Breakdown

The breakdown of the pension liabilities is as follows.

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|--|-------------------|-------------------|
| Fair value of plan assets | 1,819 | 1,829 |
| Defined benefit obligations | 2,335 | 2,401 |
| Deficit | 516 | 572 |
| Members' share of deficit | -206 | -229 |
| Deficit at the end of the concessionary | -309 | -341 |
| Write-down of pension surplus | - | - |
| Group's commitments concerning franchise period | 1 | 2 |

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.

| (increase of 0.25%) (in millions of euros) | Increase | Decrease |
|--|----------|----------|
| Discountrate | -130 | 134 |
| Inflation | 135 | -132 |
| Future salary increase | 37 | -36 |

A change in life expectancy of one year would lead to a change in the gross liability of about €61 million (€60 million as at 31 December 2017).

The impact that these changes would have on the Group's net liabilities during the franchise period 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) | 2018 | 2017 |
|--|--------------|--------------|
| Plan assets as at 1 January | 1,829 | 1,193 |
| Addion new fund | - | 531 |
| Interest income | 53 | 34 |
| Pension contributions | 53 | 37 |
| Pension benefits paid | -38 | -33 |
| Administration expenses | -8 | -6 |
| Return on plan assets, excluding interest income | -50 | 119 |
| Exchange rate gains and losses | -19 | -46 |
| Plan assets as at 31 December | 1,820 | 1,829 |
| Defined benefit obligations as at 1 January | 2,401 | 1,720 |
| Addion new fund | - | 705 |
| Pension costs | 99 | 71 |
| Interest expenses | 68 | 49 |
| Pension benefits paid | -38 | -33 |
| Net actuarial gain or loss | -167 | -44 |
| Exchange rate gains and losses | -25 | -67 |
| Defined benefit obligations as at 31 December | 2,338 | 2,401 |

Breakdown of plan assets

The breakdown of the plan assets is as follows.

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|-------------------------|-------------------|-------------------|
| Shares | 1,107 | 1,150 |
| Fixed-income securities | 375 | 207 |
| Property | 169 | 173 |
| Cash | 107 | 251 |
| Other | 62 | 48 |
| Total | 1,820 | 1,829 |

Pension costs recognised in the income statement

| (in millions of euros) | 2018 | 2017* |
|-------------------------|-----------|-----------|
| Pension costs | 61 | 43 |
| Interest expenses | - | - |
| Administration expenses | 4 | 4 |
| Franchise adjustment | -33 | -23 |
| Total | 32 | 24 |

*adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1

Unrealised actuarial gains and losses

| (in millions of euros) | 2018 | 2017* |
|--|----------|----------|
| Net actuarial gain or loss | | |
| -Demographic assumptions | 62 | - |
| -Financial assumptions | 108 | 39 |
| -Experience adjustments | - | 5 |
| Return on plan assets, excluding interest income | -50 | 119 |
| Franchise adjustment | -73 | -97 |
| Changes in members' share | -47 | -65 |
| Total | - | 1 |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1

Based on current accounting policies, the Group expects to recognise pension costs for Abellio of €35 million for the above defined benefit plans in 2019.

Other non-current employee benefits

This includes long-service award obligations. The AG2017 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) | 2018 | 2017 |
|--|-----------|-----------|
| Long-service award obligation as at 1 January | 28 | 29 |
| Payments | -2 | -3 |
| Actuarial gains and losses | 1 | - |
| Accrued interest | 2 | 2 |
| Long-service award obligation as at 31 December | 29 | 28 |

The current portion of this provision is €2 million.

The sensitivities are as follows.

| | 2018 | 2017 |
|--------------------------------|-------|-------|
| Discounting (-0.5%) | 4.5% | 4.6% |
| Total wage increase (-0.5%) | 4.2% | 4.2% |
| Careeropportunities (+25%) | 3.0% | 3.0% |
| Resignation probability (+25%) | -4.9% | -5.0% |

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 net 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 the comprehensive income.

Liabilities relating to long-service awards and early retirement are calculated actuarially and recognised at net 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) | Reorganisation costs | Provision for soil remediation | Other provisions | Total |
|---|----------------------|--------------------------------|------------------|------------|
| Carrying amount as at 1 January 2018 | 11 | 70 | 82 | 163 |
| Addition | 6 | 2 | 31 | 39 |
| Accrued interest | | | | - |
| Withdrawal | -11 | -1 | -24 | -36 |
| Other changes | | | | - |
| Release | | -1 | -20 | -21 |
| Carrying amount as at 31 December 2018 | 6 | 70 | 67 | 144 |
| Presented as: | | | | |
| Non-current | - | 68 | 51 | 119 |
| Current | 6 | 2 | 16 | 24 |

Reorganisation provisions

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 disappeared 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% (1.5% in 2017).

Other provisions

'Other provisions' include provisions for losses arising from accidents and fire, collateral for settlements with carriers and provisions for staff-related matters. The release from 'Other provisions' includes a release relating to the settlement of the monies reserved for personnel expenses that had to be paid out with retrospective effect.

Accounting policies

A provision is recognised in the balance sheet whenever the Group has a legally enforceable or *de facto* liability as a consequence of a past event and it is probable that the settlement of that liability 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 inactivity 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 publically 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 pollution occurs or when it is discovered to have occurred.

Onerous contracts

A provision for onerous contracts is included in the balance sheet if the financial benefits that the Group expects to derive from a contract are less than the unavoidable costs of satisfying the contractual commitments.

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 and other risks.

31. 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 locations for service desks, break rooms, emergency button facilities, check-in/check-out posts, energy costs, dealing with disruptions and journey information (Section 67 of the Railways Act). In addition, the ACM concluded that NS shared sensitive competitive information from Veolia and others with Abellio and Qbuzz (Section 71 of the Railways Act).

On 22 May 2017, the ACM ruled that NS had acted in violation of Section 24 of the Competitive Trading Act and Section 102 of the Treaty on the Functioning of the European Union. The ACM therefore imposed a penalty of €40.95 million on NS. Based on a norm framework that the ACM itself devised, the ACM concluded that NS's offer 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 made a loss-making offer 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 has submitted a notice of objection, asking the ACM to

reconsider its decision. On 29 March 2018, the ACM dismissed NS's objections. NS has lodged a (pro forma) appeal against the ruling on the objection. The penalty was paid in 2017 and charged to the income statement in 2017. Given that the outcome of the objection process is uncertain and any receivables from the ACM as a result of the objection process outcome do not satisfy the IFRS criterion of 'virtually certain', NS has not recognised any associated receivables as at 31 December 2018.

Public Prosecution Service

The Public Prosecution Service (specifically, the Office for Financial, Economic and Environmental Offences in 's Hertogenbosch) started an 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 NV, Qbuzz BV, Abellio Transport Holding BV and Abellio Nederland BV. In February 2016, NS Groep NV received the final report of the criminal investigation. The Public Prosecution Service then issued NS Groep NV 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 was charged and ruled that the Public Prosecution Service was not allowed to prosecute in the case of a third offence with which NS was 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 of this and the financial consequences (the size of any fine, out-of-court settlement etc.). As a result, no provision has been included for this.

Individual allowance for the Second World War

NS was commissioned by the occupying forces to drive trains during the Second World War. 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 immediate relatives collectively, but also to acknowledge their suffering individually and to meet the demand for individual compensation. NS believes that no one benefits from long legal procedures. NS 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. In January 2019, under the chairmanship of Mr Job Cohen, the Committee started its work with the task of providing individual compensation on moral grounds to a group of survivors and direct surviving relatives to be determined.

The financial effects of the individual allowances cannot be reliably determined when drawing up the annual accounts. This is related to major uncertainties regarding the size of the population and the amount that will be paid out to each individual. As a result, no provision has been recognised.

Chrome 6

On Thursday 31 January 2019, the RIVM presented the results of the Chromium-6 study of the reintegration project tROM in Tilburg. In the tROM project in Tilburg, between 2004 and 2011, benefit recipients worked on, among other things, NS trains and museum trains in the former NedTrain Tilburg workshop. The RIVM carried out research in which NS cooperated. An independent committee drew conclusions on the basis of the research results and formulated ad hoc recommendations. The committee drew firm conclusions, including about the role of NS in the Tilburger project. According to the committee, the municipality of Tilburg, NS and the Railway Museum have all dropped their stitches. At the beginning of February 2019, the parties announced that they would come to an arrangement jointly and each on the basis of their own responsibility. The aim is to provide clarity to those involved as quickly as possible.

NS provided for its share of the expected costs as at 31 December 2018.

The Police is also currently conducting criminal investigations on behalf of the Public Prosecution Service, in which NedTrain has been identified as one of the suspects. The results of this investigation are currently uncertain.

Long-term contracts

There were a number of long-term financial commitments to third parties at year-end 2018. These mainly concern operating lease agreements for trains, company cars and copiers. There are also long-term contracts for services by third parties in the areas of IT, employee health and safety, maintenance and cleaning.

Operating lease agreements

The lease amounts payable for operating lease agreements that cannot be cancelled (including rental agreements for office space) fall due as follows.

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|------------------------|----------------------|----------------------|
| < 1 year | 642 | 546 |
| 1-5 years | 2,001 | 1,481 |
| >5 years | 2,168 | 1,738 |
| Total | 4,811 | 3,765 |

The breakdown of the lease commitments by country is as follows:

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|--------------------------|----------------------|----------------------|
| United Kingdom | 2,883 | 2,605 |
| Germany | 2,073 | 1,381 |
| Netherlands | 214 | 135 |
| Intercompany elimination | -359 | -356 |
| Total | 4,811 | 3,765 |

In 2018, a sum of €517 million was accounted for operating lease agreements.

The amounts payable as shown above include sums relating to a number of franchises in Germany that are compensated in full by the franchise authorities. These amounts fall due as follows.

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|------------------------|----------------------|----------------------|
| < 1 year | 29 | 13 |
| 1-5 years | 182 | 50 |
| >5 years | 416 | 80 |
| Total | 627 | 143 |

Energy contracts

As at the end of 2018, the purchase obligations under the energy contract in the Netherlands for the volumes already covered, the payments for the programme of responsibilities and the surcharge for green electricity over the period 2019-2024 (the remainder of the 10-year contract) came to €218 million (as opposed to €227 million at the end of 2017). The volume expected to be required for 2019 and 2020 is fully covered. Transport costs and energy taxes are not included in the purchase obligations 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 2018, NS had received €65 million (2017: €11 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 income tax, all the Dutch subsidiaries belonging to the Group are part of the NS tax group. As a result, the Group is jointly and severally liable for all tax liabilities of the subsidiaries included in the tax group.

Investment commitments

At the end of 2018, the Group had outstanding investment commitments of €1,377 million (2017: €1,437 million), primarily for purchasing and upgrading trains and investments in the areas around the stations.

Contingent receivable

On 17 March 2014, the Group and the supplier reached a settlement of their dispute over the V250 trains. Part of the agreement is that NS is entitled to compensation in the event of a possible sale of the trains. These possible additional future payments due as a result of the sale of trains by the supplier have not yet been accounted for in view of the uncertainty.

Contingent liabilities

The Group has paid €27 million (after conversion) of its share in the issued share capital of EUROFIMA AG (a sum of €107 million after conversion). The Group has a liability for full payment on demand of the shares and other guarantee commitments totalling €268 million. Payment of the liability can be demanded if EUROFIMA AG's own equity position gives reason to do so. For EUROFIMA loans that are not part of the cross-border lease financing arrangements, collateral has been provided in the form of pledges on rolling stock.

As a result of the agreements made with the Belgian carrier regarding the IC Brussels service as part 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 size of that negative balance depends on the commercial results on that route.

A number of investigations are ongoing and various claims have been submitted against NS and/or its group companies, which NS is contesting. Although the outcome cannot be predicted with certainty, it is expected that these will not have negative financial consequences of any material significance.

Guarantees

The Group has issued guarantees totalling €830 million (31 December 2017: €784 million) relating to the operation of the various franchises.

Franchises

The Group has the following franchises.

Nederland

| | | |
|----------------------------|-------------------|-----|
| Hoofdrailnet/ HSL-Zuid | December 31, 2024 | net |
| Regionale trein concessies | see hereafter | net |

Verenigd Koninkrijk

| | | |
|--|------------------|-------|
| Merseyrail-concessie rondom Liverpool | July 20, 2028 | mixed |
| Greater Anglia-concessie (East Anglia) | October 12, 2015 | mixed |
| Abellio London-concessies (bus) | see hereafter | gross |
| ScotRail-concessie in Schotland (from 1. April 2015) | March 31, 2022 | mixed |
| West Midlands treinconcessie | March 31, 2026 | mixed |

Duitsland

| | | |
|---|------------------|-------|
| Emscher Ruhrtal | December 1, 2019 | gross |
| Ruhr Sieg Netz | December 1, 2034 | gross |
| Der Mungstener | December 1, 2028 | gross |
| Saale-Thüringen-Südharz (from December 2015) | December 1, 2030 | gross |
| Niederrhein-Netz | December 1, 2028 | gross |
| Rhine-Ruhr-Express (start of the operation in two steps; December 2018 and December 2020) | December 1, 2033 | gross |
| Stuttgarter Netze (start of the operation in June 2019) | December 1, 2032 | gross |
| Dieselnetz Sachsen-Anhalt (start of the operation in December 2018) | December 1, 2032 | gross |
| S-Bahn Rhein-Ruhr (start of the operation in December 2019) | December 1, 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.

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 are also 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 in 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 if NS does not achieve the minimum values for the franchise performance indicators. The performance indicators are measured for the following performance areas: general (customer satisfaction), the door-to-door journey, comfortable journeys (transport capacity at peak times), journey information (in the event of disruptions), safety (including personal safety) and reliability (punctuality for passengers).

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, 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 €152 million in 2018. 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%), then 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 2016. Any entitlement to an adjustment was first calculated in 2017 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 to an adjustment to the franchise fee 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 2017; 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 2018 and previous years.

Regional rail franchises

This concerns passenger transport by rail on the routes listed below. The franchises specify the conditions with respect to frequency, accessibility, service levels, etc. In 2018, NS operated the the franchise Gouda – Alphen aan den Rijn 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.

United Kingdom

Merseyrail franchise

Merseyrail has been operated by Abellio for a period of 25 years since 2003 as part of a 50:50 joint venture with Serco. It provides passenger services in the Liverpool region and is let by the local transport authority, Merseytravel. Merseyrail is now over half way through the contract period, and there is an option for a five-year extension. Merseytravel is part-way through procuring an entire new fleet from Stadler; the first train set is due to arrive in 2020.

Greater Anglia franchise (East Anglia)

Abellio took over the new franchise for Greater Anglia on 16th October 2016, having won the bid to continue operations following the end of the previous contract. Abellio had run the old Greater Anglia franchise since 2012. Abellio divested of a 40% share of the franchise to Mitsui in January 2017. The new franchise will run until 12th October 2025, with an option for a further extension of one year. Greater Anglia operates trains on rural, intercity and suburban services in the East Anglia region of the UK and is undertaking a complete fleet refresh with the first of the trains arriving in 2019.

ScotRail franchise

Abellio has been operating ScotRail under an Alliance agreement with the infrastructure provider – Network Rail – since 1st April 2015 for a period of at least seven years. The contract is for ten years with a break clause at year seven, exercisable at year five. There is also an option for a further extension of two years through to 31st March 2027. The contract is let by Transport Scotland and provide intercity, regional and rural services throughout Scotland.

West Midland franchise

Abellio operates the West Midlands franchise for a period of eight years and three months as part of a 70:15:15 joint venture with Mitsui and JR East. The franchise began operating on 10th December 2017 and will continue until 31st March 2026. The franchise provides intercity, urban and regional services in the West Midlands area, extending to London and Crewe and Liverpool as part of the London Northwestern Railway. The franchise will bring in over 400 new train vehicles by 2021 and a suite of associated infrastructure and improvement works to improve customer experience across the entire franchise.

Franchises in London

Abellio London operates bus services from five permanent depots in South and West London, and is currently in the process of building a new site in place of a temporary depot at Southall, West London. Abellio operates approximately 8% of the London bus market which is franchised to the local public sector transport provider, Transport for London. The contracts each run for a period of five years with an optional two year extension, subject to meeting various performance criteria.

Abellio Germany

Abellio operates various train services in the regions North Rhine-Westphalia and Mitteldeutschland against a predetermined compensation from the government (subsidy), which is indexed annually. The concessions have a term ending between 2019 and 2030.

Abellio is one of the leading private railway transport companies in Germany. Abellio is headquartered in Berlin and operate rail networks in the federal states of North Rhine-Westphalia, Saxony, Lower Saxony, Saxony-Anhalt, Hessen and Thuringia. Abellio Rail NRW GmbH in Hagen, Abellio Rail Mitteldeutschland GmbH in Halle as well as WestfalenBahn GmbH in Bielefeld are responsible for ongoing operations. In June 2019 Abellio Rail Baden-Württemberg GmbH will start operations.

Abellio Rail NRW operates regional rail transport services across several rail lines throughout North Rhine-Westphalia, including in the Emscher-Ruhr network with Bochum, Wanne-Eickel and Gelsenkirchen as well as in the Ruhr-Sieg network between Essen, Hagen, Iserlohn and Siegen. Abellio is also operating the "Der Müngstener" route steeped in tradition since December 2013, running over Germany's highest rail-way bridge through the towns of Wuppertal, Remscheid and Solingen. Since April 2017 Abellio is responsible for the cross-border route between Düsseldorf and the Dutch city of Arnhem by operating the Lower Rhine network. At the end of 2018 Abellio Rail NRW started the important "Rhine-Ruhr-Express" mobility project and in 2019 Abellio will take over the largest batch of the Rhine-Ruhr S-Bahn.

Abellio Rail Mitteldeutschland GmbH has been ensuring mobility for those travelling between Kassel, Halle (Saale), Leipzig, Eisenach, Gotha, Erfurt, Weimar and Saalfeld on the Saale-Thuringia-Südharz electric network since 2015. Abellio started commence passenger operations on the Saxony-Anhalt diesel network in December of this year. Passengers are now be able to travel in between the major cities of Erfurt, Magdeburg, Potsdam and Berlin.

Abellio Rail Baden-Württemberg GmbH will operate along the Neckartal as part of the Stuttgart network from 2019. Passengers in Baden-Württemberg will be able to benefit from the quality standards of Abellio in the future. Abellio work hard to implement the quality leadership on the rails between Tübingen, Heidelberg and Mannheim already seen in other German states.

In 2017 Abellio Deutschland became the sole shareholder of WestfalenBahn. The WestfalenBahn links the cities of Emden, Münster, Bielefeld, Hannover and Braunschweig along the Emsland-Mittelland network.

32. 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) is the remuneration received for student railcards (€448 million in 2018, €468 million in 2017).

The infrastructure charge for the Dutch infrastructure is paid to ProRail BV, a State-affiliated company. This is explained in note 31.

Furthermore, the Group received a sum of €18 million in grants from the State in 2018 through various schemes (2017: €27 million). These grants are recognised as revenue.

The transactions with the Executive Board and the Supervisory Board members are explained in note 2.

There were no significant transactions in 2018 or 2017 with joint ventures and other participating interests.

Group companies

The main companies included in the consolidated financial statements are:

| | Percentage interest | | Statutory Seat |
|--|---------------------|-------|----------------|
| | 2018 | 2017 | |
| Operating companies | | | |
| 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 |
| Subsidiaries of operating companies | | | |
| 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 | 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 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 |
| Joint ventures | | | |
| Merseyrail Services Holding Company Ltd | 50.0 | 50.0 | Hampshire |
| Other interests | | | |
| Eurofima AG | 5.8 | 5.8 | Basel |

* Pursuant to the provisions of Section 403, 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, 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.

33. 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.



Company financial statements

Company statement of financial position as at 31 December 2018

(before profit appropriation)

| (in millions of euros) | December 31, 2018 | December 31, 2017 |
|---------------------------------------|-------------------|-------------------|
| Non-current financial assets | 3,616 | 3,476 |
| Total assets | 3,616 | 3,476 |
| Equity | | |
| Share capital | 1,012 | 1,012 |
| Other reserves | 2,170 | 2,149 |
| Revaluation reserve for associates | 61 | 61 |
| Legal reserve development costs | 281 | 222 |
| Legal reserve translation differences | -14 | -14 |
| Result for the period | 106 | 46 |
| | 3,616 | 3,476 |
| Total liabilities | 3,616 | 3,476 |

Company statement of income 2018

Company income statement 2018

| (in millions of euros) | 2018 | 2017* |
|-------------------------------------|------------|-----------|
| Other result | - | - |
| Result of group companies after tax | 106 | 46 |
| Nett result | 106 | 46 |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1

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 paragraph 8, Section 362, 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), Part 9, Book 2 of the Netherlands Civil Code, a summarised profit and loss account has been 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 for group companies

The result for group companies consists of the result after income tax.

Notes to the company statement of financial position and income statement

The amounts included in the explanatory notes are in millions of euros, unless stated otherwise.

Non-current financial assets

Participating interests in group companies

| (in millions of euros) | 2018 | 2017* |
|--|--------------|--------------|
| Balance as at 1 January | 3,476 | 3,509 |
| Effect change of accounting policy pensions | - | 2 |
| Changes due to application of IFRS 9 | 45 | - |
| Revised balance as at 1 January 2017 | 3,521 | 3,511 |
| Share in result | 106 | 46 |
| Dividend distributed for the previous reporting year | -8 | -79 |
| Other changes | -3 | -2 |
| Balance as at 31 December | 3,616 | 3,476 |

* adjusted for change in accounting principle regarding the United Kingdom railway pension schemes, as explained in Section 1

Equity

Other reserves

| (in millions of euros) | Hedging reserve | Fair value reserve | Actuarial reserve | General reserve | Total other reserves | Legal reserve development costs | Revaluation reserve for associates | Legal reserve translation differences |
|---------------------------------------|-----------------|--------------------|-------------------|-----------------|----------------------|---------------------------------|------------------------------------|---------------------------------------|
| Balance as at 1 January 2017 | -7 | - | 29 | 2,079 | 2,101 | 167 | 30 | -11 |
| Effect change of accounting policy | | | -30 | 37 | 7 | | -9 | |
| Revised balance as at 1 January 2017 | -7 | - | -1 | 2,116 | 2,108 | 167 | 21 | -11 |
| Changes revaluation reserves | 3 | - | 1 | | 4 | | - | -3 |
| Dividend paid | | | | -79 | -79 | | | |
| Result previous period | | | | 212 | 212 | | | |
| Other changes | | | | -96 | -96 | 55 | 40 | |
| | 3 | - | 1 | 37 | 41 | 55 | 40 | -3 |
| Balance as at 31 December 2017 | -4 | - | - | 2,153 | 2,149 | 222 | 61 | -14 |
| Changes due to application of IFRS 9 | | 45 | | | 45 | | | |
| Balance as at 1 January 2018 | -4 | 45 | - | 2,153 | 2,194 | 222 | 61 | -14 |
| Changes revaluation reserves | -3 | - | - | | -3 | | - | |
| Dividend paid | | | | -8 | -8 | | | |
| Result previous period | | | | 46 | 46 | | | |
| Other changes | | | | -59 | -59 | 59 | | |
| | -3 | - | - | -21 | -24 | 59 | - | - |
| Balance as at 31 December 2018 | -7 | 45 | - | 2,132 | 2,170 | 281 | 61 | -14 |

The legal reserve was formed for software development costs. A revaluation reserve was formed for direct changes to the equity in joint ventures and for the undistributable portion of the equity of NS Insurance. The 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.

Off-balance-sheet commitments

No claims have been brought against NV Nederlandse Spoorwegen and the consolidated participating interests, other than as indicated in note 31, that have not been recognised appropriately in the balance sheet.

For the purpose of income tax, both NV Nederlandse Spoorwegen and its Dutch subsidiaries are part of the NV Nederlandse Spoorwegen tax group. Consequently NV Nederlandse Spoorwegen is jointly and severally liable for the tax liabilities of the subsidiaries included in the tax group.

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 32 for an overview of the participating interests.

Utrecht, 21 February 2019

Supervisory Board

Mr. G.J.A. van de Aast
Chairman

Mrs. M.E. van Lier Lels

Mr. J.J.M. Kremers

Mr. P. Rosenmüller

Mrs. J.L. Stuijt

Mr. W.J. van der Feltz

Board of Directors

Mr. R.H.L.M. van Boxtel
CEO

Mr. H.L.L. Groenewegen
Finance Director

Mrs. S.M. Zijderveld
Chief Governance, Risk & Compliance Officer

Mrs. M.E.F. Rintel
Director of Operations

Mr. T.B. Smit
Commerce and Development Director

Other information



Combined independent auditor's report on the financial statements and sustainability information

To: the shareholders 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 sustainability, please refer to the next pages.

Summary

Conclusions

| Object of audit or review | Outcome of work performed | Level of assurance |
|---|----------------------------|--------------------|
| Financial statements 2018 (consolidated and corporate) | True and fair view | Reasonable (audit) |
| Sustainability information 2018 | Reliable and adequate view | Limited (review) |
| Other information, including the reports by the 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 the financial statements 2018 (consolidated and company) | The Netherlands, United Kingdom and Germany | € 45 million, based on 0.8% revenues | <ul style="list-style-type: none">- Revenue recognition- Reliability and continuity of the automated data processing system- Accounting for settlement mechanisms included concession contracts Change in accounting policies relating to defined benefit pension plans in the United Kingdom |
| Review of the sustainability information 2018 | The Netherlands, United Kingdom and Germany | Varies for each relevant part of the sustainability information in scope | Progress and reliability performance indicators related to the main rail network |
| Procedures for other information | Annual report | Similar materiality levels as our audit and review scopes | No areas of specific focus |

Combined independent auditor's report on the financial statements and sustainability information

To: the shareholders and supervisory board of N.V. Nederlandse Spoorwegen

Our conclusions

We have audited the financial statements 2018 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 2018 and of its result and its cash flows for 2018 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 2018 and of its result for 2018 in accordance with Part 9 of Book 2 of the Dutch Civil Code

We have reviewed the sustainability information for the year 2018 of N.V. Nederlandse Spoorwegen based in Utrecht. The scope is described in 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 sustainability 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 2018;

in accordance with the Sustainability Reporting Standards (option Core) of the Global Reporting Initiative (GRI) and the applied supplemental reporting criteria as disclosed on chapter "Scope and reporting criteria" of the annual report.

Based on our procedures in accordance with Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720, we conclude that the other information in the annual report, including the report of the NS Executive board and the NS 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

The annual report of N.V. Nederlandse Spoorwegen consists of the financial statements and other information, including the report of the 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 2018. The following information in the annual report is in scope of our assurance-engagements.

The consolidated financial statements comprise:

- The consolidated statement of financial position as at 31 December 2018
- The following statements for 2018: the consolidated income statement, the consolidated statement of comprehensive income, changes in equity and the consolidated cash flow statement
- 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 2018
- The company profit and loss account for 2018
- The notes comprising a summary of the accounting policies and other explanatory information

The sustainability information consists of the chapters "In brief", "2018 in a nutshell", "Foreword by the CEO", "The profile of NS", "Our strategy", all sections presented in "Activities in the Netherlands" and "Operations abroad", "Our impact on the environment and on society", "NS as an employer in the Netherlands", "Organisational improvements", "Dialogue with our stakeholders" and "Scope and reporting criteria" in the Annual Report of N.V. Nederlandse Spoorwegen.

The other information comprises:

- The report by the NS Executive board consisting of: the report by the Executive board, Organisation of risk management, Corporate Governance, the report on the activities in the Netherlands and operations abroad;
- 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 sustainability information

The sustainability 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 sustainability 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 2018 on 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 sustainability information are not part the sustainability information as reviewed by us. We therefore do not provide assurance on this information.

Reporting criteria

The financial statements and the sustainability 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 reporting criteria used for the preparation of the financial statements and the sustainability 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 board of management and report of the supervisory board | Part 9 of Book 2 of the Dutch Civil Code |
| Sustainability 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 sustainability 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 sustainability 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 | € 45 million (2017: € 40 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 € 2.25 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.

Sustainability information

Based on our professional judgment we determined materiality levels for each part of the sustainability information and for the sustainability 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 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. We have performed audit procedures ourselves at the Dutch group entities. We used the work of other auditors in our international network for the foreign group entities. Based on the full scope and specific scope procedures, we have obtained audit assurance on 90% of assets and 88% of revenues.

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 sustainability 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 sustainability information as a whole and to conclude thereon, and we do not provide a separate conclusion on these matters.

In 2017, "Tax position and fiscal risks" en "Settlement of claims concerning irregularities in the Limburg tendering process" have been identified as key matters of our audit.

The key issues in the 2017 tax position related to the developments regarding the transfer of the rolling stock from the Irish subsidiary NS Financial Services to the Dutch company NS Lease B.V., as well as the valuation of deferred tax assets.

Due to the agreement reached with the Dutch and Irish tax authorities regarding the transfer of the rolling stock and the developments in the estimated taxable results for 2019 and further years, the risk with regard to the 'Tax position and tax risks' is no longer identified as key audit matter.

"Settlement of claims concerning irregularities in the Limburg tendering process" is also no longer identified as a key audit matter because NS paid and recorded the fine imposed by the ACM in 2017. We hereby note that the investigation by the OM has not yet been completed. The developments in 2018, however, give no reason to maintain this as a key audit matter.

In 2018 we included two new key matters of our audit. "Accounting for settlement mechanisms included concession contracts" is a key matter because there is uncertainty about the settlement with concession grantors in the United Kingdom. "Change in accounting policies relating to defined benefit pension plans in the United Kingdom" is a key matter due to both the complexity and the impact on the results.

For the audit of the financial statements we identified the following key audit matters:

Revenue recognition

| Key audit matter | How our audit addressed the matter | Key observations |
|---|--|---|
| <p>Revenue of € 5.9 billion from passenger services is included in the account "Revenue". These passenger revenues include revenues out of the sales of various ticket types entitling their holder to transport as well as, government contributions.</p> <p>The diversity in ticket types, combined with the high volume of transactions, require 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.</p> <p>The disclosures relating to revenue recognition with regard to passenger services are included in note 1 of the financial statements.</p> | <p>Our activities include the assessment of internal controls and the IT environment, performing data analysis procedures such as trend analyses and inspection of manual journal entries, performing partial observations on correct and complete transaction processing, and a review of management's estimates with regard to revenue allocation of the governmental contributions.</p> | <p>As a result of our procedures we note that NS has increased the quality of IT management during 2018 by following-up some of the findings reported by us in previous years.</p> <p>The findings that still require attention and related recommendations have again been brought to the attention our management letter.</p> |

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.</p> <p>In recent years, NS has invested in the improvement of IT hardware, systems and processes focusing on increasing the IT infrastructure effectiveness and the reliability and continuity of automated data processing.</p> | <p>We reviewed 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 specialized IT auditors in our audit team.</p> <p>Our procedures consisted of the assessment of the developments in the IT infrastructure and testing of the internal control procedures relating to IT systems and processes.</p> <p>We have highlighted the risks and recommendations we have identified and focus on improvements in this area.</p> <p>We refer to the paragraph Organisation of risk management included in the NS Annual Report.</p> | <p>As a result of our procedures we note that NS has further increased the quality of IT management during 2018 by following-up some of the findings reported by us in previous years.</p> <p>The findings that still require attention and related recommendations have again been brought to the attention in our management letter. In many areas we have been able to verify that these have been adequately followed up and resolved by NS.</p> <p>We also note that NS has further improved information security in recent years.</p> <p>Regarding the reliability and continuity of automated data processing we also refer to the paragraph Organisation of risk management included in the NS Annual Report.</p> |

Accounting for settlement mechanisms included concession contracts

| Key audit matter | How our audit addressed the matter | Key observations |
|---|---|---|
| <p>Various settlement mechanisms have been included in the concession agreements in both the Netherlands and abroad that relate to financial settlements that occur in the event of developments, such as lagging (macro) economic growth and infrastructural disruptions.</p> <p>To determine the size of these settlements with the grantor, NS must make assumptions regarding the allocation to periods and other specific settlement mechanisms as included in these various concession agreements in the Netherlands and abroad.</p> <p>In the United Kingdom, uncertainties have arisen in various balance sheet positions relating to those settlement mechanisms and current disputes with the grantors.</p> <p>The disclosures relating to these specific settlements are included in notes 7 and 17 of the financial statements.</p> | <p>On the basis of the concession agreements and other source documents, we have verified the agreements that exist between NS and the various grantors.</p> <p>The Management Board made an estimate of the positions as at 31 December 2018.</p> <p>We have assessed the reasonableness underlying the size of the recognized settlements on the basis of underlying documentation and the conclusions of both internal and independent external advisors.</p> <p>Furthermore we also tested the principles 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 at the balance sheet date.</p> | <p>We concur with the accounting treatment of NS and refer to the disclosure of in note 7 and 17 of the financial statements.</p> |

Change in accounting policies relating to defined benefit pension plans in the United Kingdom

| Key audit matter | How our audit addressed the matter | Key observations |
|--|---|--|
| <p>NS en Abellio hebben een stelselwijziging doorgevoerd in de wijze waarop de pensioenlasten NS and Abellio have implemented a change in accounting policies in the manner in which the pension costs are recognized with regard to the pension schemes that apply to the various train operating companies (TOCs) in the United Kingdom.</p> | <p>We have audited the agreements between NS and Abellio and the various grantors on the basis of the pension agreements and other source documents.</p> <p>We have assessed whether the new accounting policies are in accordance with the applicable reporting standards.</p> | <p>We concur with NS's accounting treatment and refer to Section 1, "Change in accounting policies relating to defined benefit pension plans in the United Kingdom" of the financial statements.</p> |
| <p>A special feature of the pension scheme consists of the fact that the scheme offered to employees has the characteristics of a so-called defined benefit scheme, while the pension obligation entered into by the TOC is fully transferred to the new concession holder after the concession has ended.</p> | <p>In addition, we have assessed whether there is sufficient basis for implementing a change in accounting policy in accordance with the applicable reporting standards.</p> | |
| <p>The change relates to the manner in which the pension costs are recorded in the profit and loss account. Only the costs that are for the employer being NS and Abellio during the period they hold the concession are taken into account.</p> | | |
| <p>As a result, pre-tax income for 2018 increased by € 35 million and 2017 by € 25 million, with a corresponding change in the "unrealized actuarial results". The change in accounting policy does not affect equity and cash flows.</p> | | |

For the review of the sustainability 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 |
|--|---|---|
| NS measures the progress in achieving its strategy through the performance indicators related to the main rail network. | As part of our procedures, we have obtained an understanding of the reporting process (including internal control measures). | NS is working on an improvement process around the internal control of these performance indicators. NS expects that this project will still be ongoing during 2019. |
| The progress of these performance indicators also forms an important part of the midterm review in 2019 and the final evaluation in 2024 regarding the extension of the franchise. | We furthermore reviewed the consistency with the public definitions in the "Vervoerplan 2018" (Transport Plan 2018) and reconciled these with what was reported by NS to the Ministry of Infrastructure and Water Management. | In order to correctly interpret the implementation of these performance indicators, they must be read in conjunction with the definitions from the Transport Plan 2018. |
| Given the relevance, we have identified this set of performance indicators as a whole as a key review matter. | We have reviewed the disclosures on the performance indicators as included in the section Activities in the Netherlands. | We deem the disclosures of the performance indicators related to the main rail network to be sufficient. |

Report on other legal and regulatory requirements

Engagement

We were engaged by the shareholder as auditor of N.V. Nederlandse Spoorwegen on September 3, 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 sustainability information in accordance with the Sustainability Reporting Standards version (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 sustainability information are included on chapter "Scope and reporting criteria" of the annual report

Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements and the sustainability 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 company's (financial) reporting process.

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 have detected all material errors and fraud.

Our review of the sustainability 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 review engagements is therefore substantially less than the assurance obtained in audit engagements.

We apply the 'Nadere voorschriften kwaliteitssystemen' (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.

Amsterdam, 21 February 2019

Ernst & Young Accountants LLP

Signed by J. Verhagen

Annex to the combined independent auditor's report on the financial statements and sustainability information

Work performed

We have exercised professional judgment and have maintained professional scepticism 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

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 sustainability 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 sustainability 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 sustainability information, including obtaining a general understanding of internal control relevant to our review;
- Identifying areas of the sustainability 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 sustainability information responsive to this risk analysis. These further review procedures consisted amongst others of:
 - Interviewing management 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 sustainability information
 - Obtaining assurance information that the sustainability 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 2018 on 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 2018 on www.ns.nl/mvoberekeningen;
 - Evaluating the definitions of the performance indicators related to the main rail network in the Transport Plan 2018 as included in the Downloads on nsjaarverslag.nl/jaarverslag-2018;
 - Performing an analytical review of the data and trends submitted for consolidation at corporate level
 - Reconciling the relevant financial information with the financial statements;
 - Evaluating the consistency of the sustainability information with the information in the annual report which is not included in the scope of our review;
 - Evaluating the consistency of the sustainability 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 sustainability information;
 - Considering whether the sustainability information as a whole, including the disclosures, reflects the purpose of the reporting criteria used

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 sustainability 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 sustainability 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.



NS ten-year summary

| (in millions of euros) | 2018 | 2017* | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Balance sheet | | | | | | | | | | |
| Assets | | | | | | | | | | |
| Property, plant and equipment | 3,979 | 3,845 | 3,654 | 3,296 | 3,157 | 3,115 | 3,405 | 3,433 | 3,272 | 3,150 |
| Investment property | 151 | 170 | 197 | 194 | 196 | 169 | 314 | 315 | 309 | 317 |
| Intangible assets | 416 | 357 | 257 | 225 | 174 | 125 | 117 | 76 | 64 | 157 |
| Investments recognised using the equity method | 17 | 26 | 39 | 183 | 185 | 197 | 14 | 14 | 14 | 40 |
| Other financial assets, including investments | 159 | 158 | 267 | 340 | 226 | 205 | 176 | 150 | 146 | 305 |
| Deferred tax assets | 196 | 260 | 229 | 278 | 295 | 385 | 346 | 392 | 407 | 438 |
| Total non-current assets | 4,918 | 4,816 | 4,643 | 4,516 | 4,233 | 4,196 | 4,372 | 4,380 | 4,212 | 4,407 |
| Inventories | 169 | 161 | 139 | 138 | 119 | 109 | 134 | 80 | 95 | 132 |
| Other investments | - | - | - | 270 | 223 | 231 | 279 | 362 | 209 | 150 |
| Trade and other receivables | 830 | 648 | 724 | 659 | 499 | 545 | 509 | 680 | 892 | 1,245 |
| Income tax receivables | 16 | 24 | 4 | 32 | 32 | 30 | 11 | 14 | - | 34 |
| Cash and cash equivalents | 906 | 565 | 709 | 671 | 775 | 759 | 948 | 534 | 386 | 546 |
| Assets held for sale | 191 | - | 140 | - | - | - | - | - | - | - |
| Total current assets | 2,112 | 1,398 | 1,716 | 1,770 | 1,648 | 1,674 | 1,881 | 1,670 | 1,582 | 2,107 |
| Total assets | 7,030 | 6,214 | 6,359 | 6,286 | 5,881 | 5,870 | 6,253 | 6,050 | 5,794 | 6,514 |
| Equity and liabilities | | | | | | | | | | |
| Equity | 3,627 | 3,477 | 3,511 | 3,309 | 3,216 | 3,044 | 3,168 | 2,977 | 2,831 | 2,871 |
| Deferred credits | 275 | 314 | 328 | 263 | 112 | 122 | 134 | 170 | 213 | 229 |
| Loans and borrowings, including derivatives | 740 | 551 | 293 | 440 | 867 | 730 | 577 | 180 | 315 | 785 |
| Employee benefits | 30 | 30 | 31 | 30 | 33 | 33 | 35 | 31 | 34 | 34 |
| Provisions | 119 | 114 | 100 | 155 | 140 | 182 | 277 | 349 | 175 | 233 |
| Accruals | 42 | 42 | 36 | 55 | 1 | 23 | 39 | 239 | 103 | 29 |
| Deferred tax liabilities | 48 | 59 | 160 | 168 | 169 | 158 | 153 | 136 | 103 | 88 |
| Total non-current liabilities | 1,254 | 1,110 | 948 | 1,111 | 1,322 | 1,248 | 1,215 | 1,105 | 943 | 1,398 |
| Bank overdrafts | - | - | - | - | - | - | - | - | - | 18 |
| Loans and borrowings, including derivatives | 98 | 201 | 77 | 488 | 60 | 57 | 48 | 365 | 387 | 292 |
| Corporate tax payables | 12 | 26 | 7 | 22 | 8 | 8 | 12 | 17 | 7 | - |
| Trade and other payables | 1,315 | 1,105 | 1,023 | 1,060 | 868 | 1,003 | 1,248 | 784 | 794 | 1,210 |
| Deferred income | 694 | 246 | 641 | 260 | 372 | 314 | 387 | 754 | 751 | 707 |
| Provisions | 24 | 49 | 37 | 36 | 35 | 196 | 175 | 48 | 81 | 18 |
| Liabilities held for sale | 6 | - | 115 | - | - | - | - | - | - | - |
| Total current liabilities | 2,149 | 1,627 | 1,900 | 1,866 | 1,343 | 1,578 | 1,870 | 1,968 | 2,020 | 2,245 |
| Total equity and liabilities | 7,030 | 6,214 | 6,359 | 6,286 | 5,881 | 5,870 | 6,253 | 6,050 | 5,794 | 6,514 |
| Consolidated income statement | | | | | | | | | | |
| Revenue | 5,926 | 5,121 | 5,093 | 4,973 | 4,144 | 3,873 | 4,638 | 3,628 | 3,520 | 3,271 |
| Total operating expenses | 5,745 | 5,084 | 4,965 | 4,876 | 3,863 | 3,990 | 4,284 | 3,356 | 3,286 | 3,121 |
| Share in result of investees recognised using the equity method | 14 | 20 | 142 | 70 | 40 | 47 | - | - | - | - |
| Result from operating activities | 195 | 57 | 270 | 167 | 321 | -70 | 354 | 272 | 234 | 150 |
| Net finance result | -14 | -5 | -9 | -23 | -35 | -26 | -25 | -12 | -22 | 4 |
| Share in result of investees recognised using the equity method | - | - | - | - | - | - | 1 | 1 | 1 | - |
| Result before income tax | 181 | 52 | 261 | 144 | 286 | -96 | 330 | 261 | 213 | 154 |
| Income tax | -65 | -5 | -49 | -26 | -106 | 53 | -67 | -50 | -53 | -37 |
| Result for the period | 116 | 47 | 212 | 118 | 180 | -43 | 263 | 211 | 160 | 117 |

