

See www.nsannualreport.nl for the online version

NS Annual Report 2017



Table of contents

2	In brief
4	2017 in a nutshell
8	Foreword by the CEO
12	The profile of NS
16	Our strategy

Activities in the Netherlands

22	2017 Results
25	An attractive physical offering
29	Optimising the customer experience
34	World-class stations
39	Performance on HSL South
44	Perfect execution
48	New and upgraded rolling stock
50	Organisational improvement
55	Safe and sustainable travel

Operations abroad

63	Abellio
65	Abellio's strategy
67	Abellio UK
74	Abellio Germany

79	Outlook for 2018
----	------------------

NS Group

84	Report by the Supervisory Board
96	Corporate Governance
101	Managing risks
114	Finances in brief
126	Our impact on the environment and on society
138	NS as an employer in the Netherlands
144	Dialogue with our stakeholders
164	Scope and reporting criteria

Financial statements

168	Financial statements
236	Company financial statements

Other information

243	Combined independent auditor's report on the financial statements and sustainability information
253	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 PASSENGERS SATISFIED

80% gave travelling by train a score of 7 out of 10 or higher (77% in 2016)



NEW FEATURES IN THE JOURNEY PLANNER

More options for the complete door-to-door journey



TRAINS ON TIME MORE OFTEN (91.6%)

Passengers arrived on time more often and caught their connecting trains more often than in 2016



58 NEW SPRINTER TRAINS ON THE TRACKS

From 2018, NS will start using another 118 Sprinter trains, with a total of 20,000 seats



CLEAN TRAINS

62% of passengers gave a score of 7 out of 10 or higher (58% in 2016). Cleaning during the journey got lots of positive reactions



PAYMENT BEING MADE EASIER

Tests with post-payment for public transport and payment using smartphones



'HELLO PASSENGERS'

NS uses gender-neutral language when addressing passengers and in its correspondence



ALL TRAINS ON GREEN ELECTRICITY

CO₂-emissions of trains in the Netherlands down to zero



CHANCE OF GETTING A SEAT

Chance of getting a seat the same as in 2016 (95.1%). NS deployed more trains, thanks in part to more efficient maintenance



NUMBER OF SPADS IN THE NETHERLANDS

47



1,000 PUBLIC TRANSPORT BICYCLES RECYCLED

Over 3.1 million trips by OV-fiets (2016: 2.4 million)



NUMBER OF NS STAFF IN THE NETHERLANDS

21,835



6 INTERCITY TRAINS AN HOUR

Between Eindhoven
and Amsterdam



CUSTOMER SATISFACTION HSL SOUTH

77% of passengers gave
a score of 7 out of 10 or higher
(78% in 2016)



ABELLIO

Contributed € 2,118 million
to the result
(€ 2,136 million in 2016)



PROFIT

€ 24 million
(€ 212 million in 2016)



INVESTMENTS

€ 618 million
(€ 791 million in 2016)



REVENUE

€ 5,121 million
(€ 5,093 million in 2016)

2017 in a nutshell



2017 was a successful year for NS. We met the targets for passengers in the Netherlands, continuing the upward trend from 2016. We improved our performance in areas such as punctuality and we introduced new trains. We also made travelling by train more attractive, for example with high-frequency trains. In this way, we are working towards the midterm review in 2019 when the government will assess our performance. Abellio started the new West Midlands franchise in December 2017.

Our performance on the main rail network

Performance	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019**
General customer satisfaction with the domestic main rail network	80%	77%	74%	80%
General customer satisfaction with HSL South services	77%	78%	68%	73%
Customer satisfaction with personal safety	88%	87%	81%	83%
Punctuality for passengers (to 5 minutes) on the main rail network*	91.6%	90.6%	89.2%	91.1%
Punctuality for passengers (to 15 minutes) on the main rail network*	97.4%	97.3%	96.7%	97.3%
Punctuality for passengers (to 5 minutes) on the HSL*	83.5%	81.7%	82.5%	84.1%
Quality of connections to other carriers *	94.5%	94.1%	93.7%	95.6%
Seat availability at peak times (main rail network)*	95.1%	95.1%	94.3%	95.5%
Seat availability at peak times (HSL)*	96.8%	97.3%	91.2%	94.9%
Top 10 busiest trains	2.4%	2.4%	4.9%	4.0%
Journey information during the train journey	86.3%	85.8%*	78.0%*	83.1%
Information in the train and at the station about disruptions	83.2%	82.0%	75.0%	80.0%

* New value with respect to 2016 as a result of technical changes or changes to the methodology that have been taken into account in the performance indicators. The results are therefore not comparable to the results from the 2016 annual report. See [Results for 2017](#) for an explanation.

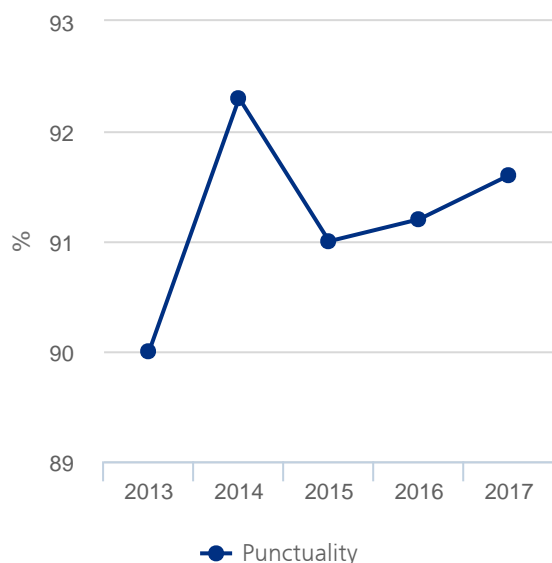
** Target from the Transport Plan 2018

The completely revised timetable and the introduction of new trains improved train journeys in 2017. All the new FLIRT trains have been running since 2017 and, together with ProRail, we have been working on improvements to the facilities at smaller stations. As a result, the nationwide customer satisfaction figure for stations rose to 73% (2016: 70%). More bicycle storage facilities and public transport bicycles (OV-fiets) let us improve the door-to-door journey too.

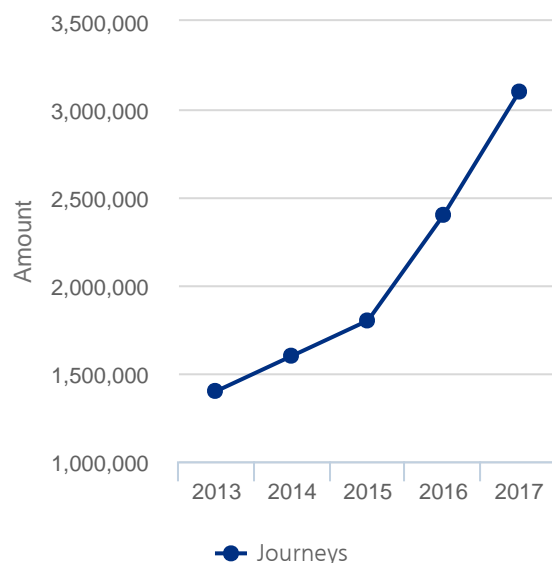
The introduction of the new timetable saw us bring in high-frequency services between Eindhoven and Amsterdam, with an Intercity train every ten minutes. This increased capacity on this busy route. All our trains in the Netherlands have been running exclusively on green power from wind energy since 1 January 2017. This means that the net impact of our train operations is CO2 neutral. These milestones boosted general customer satisfaction. The introduction of the new route from The Hague to Eindhoven on the High-Speed Line (HSL) South resulted in a disappointing first quarter because of the complexity of the system and product; performance on the HSL South improved considerably after that. This allowed NS to meet the performance agreements that were made with the Ministry of Infrastructure and Water Management.

Performance on the main rail network in the Netherlands in the longer term

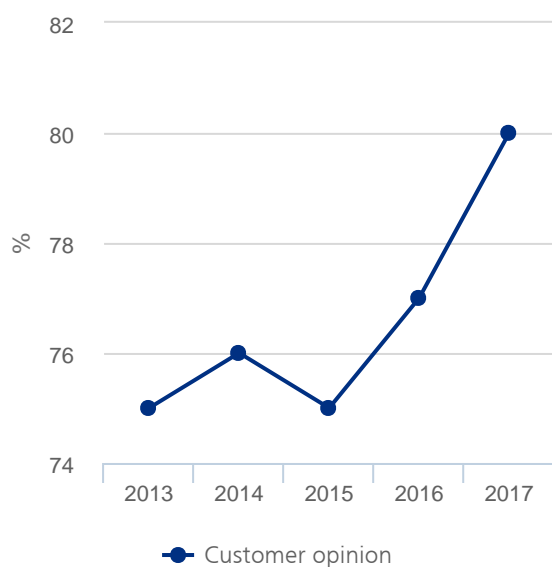
Punctuality for passengers



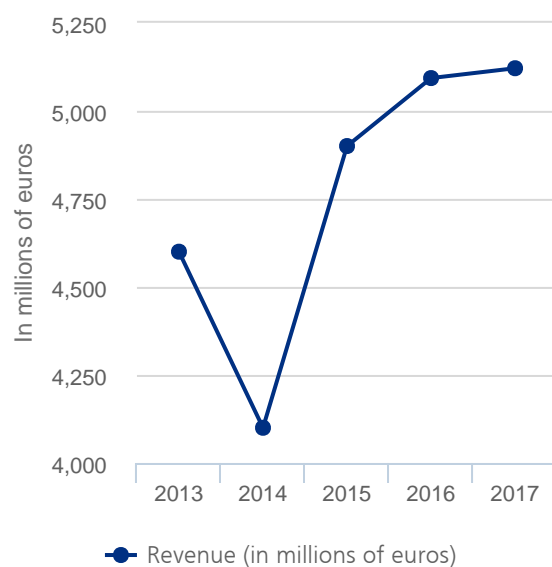
OV-fiets



Customer opinion



Revenue



Abellio

NS is continuing to acquire experience in the United Kingdom and Germany through Abellio and we are preparing for any further deregulation of the railways. In 2017, Abellio UK and its partners won the West Midlands franchise in the United Kingdom and Abellio Germany added WestfalenBahn to its portfolio. Abellio is now the fourth largest carrier on the railways in both the United Kingdom and Germany.

Finances

In financial terms, NS had a positive year in 2017, but healthy business operations with sufficient returns remain a challenge. Revenues were €5,121 million, which is an increase with respect to 2016 (€5,093 million). The main rail network franchise KPIs for 2019 are leading factors in the financial policy as well for the NS business plan: total investments of €618 million meant we continued to invest in programmes that help us achieve the targets for the KPIs, customer satisfaction, new rolling stock and productivity. A profit of €24 million was recorded as opposed to €212 million in 2016. Whereas in 2016 NS still had exceptional income items from the sale of property (€117 million), in 2017 NS had exceptional items of expenditure, in particular the fine of €41 million imposed by the Netherlands Authority for Consumers and Markets (ACM).

Our impact

Passengers in the Netherlands travelled 150 million more kilometres by train in 2017 compared with 2016 (up by 0.8%), 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 were running entirely on wind energy in 2017. 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 show that this is increasingly being done usefully, reducing the negative impact of journey time.

NS in 2018

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, it is important that everyone concerned remains focused so that the upward trend in performance can be retained. From April onwards, Eurostar will be running between London and Amsterdam. From the autumn of 2018 onwards, there will be a phased introduction of new Sprinters from CAF onto the tracks. We are continuing to invest in new trains and in modernising existing rolling stock. In addition, we are keeping our full attention on conduct and integrity within our organisation. We are continuing to work on improvement programmes for our key franchise KPIs. Furthermore, we are looking at the issues that are hot topics in the regions and at how NS can help improve mobility throughout the Netherlands. In Germany we are mobilising as part of the new franchises, whereas the focus in the United Kingdom is on operational improvements, taking account of the effects of Brexit on passenger behaviour and revenues.

Foreword by the CEO

NS can look back on 2017 with a suitably modest degree of pride. In addition to the good results, 2017 was once again a year in which we invested in our passengers. We also see the challenges: keeping the Netherlands accessible, good public transport in the regions and services on the High-Speed Line (HSL).

The Netherlands is becoming increasingly urbanised, traffic congestion records are broken almost every week, the tracks are overcrowded during peak hours and Schiphol Airport is getting ever busier. The entire mobility sector – whether it's cars, bikes, buses, metro or trains – is feeling how urgently the Netherlands needs to be offered the infrastructural space that it deserves in this period of economic growth. NS has an important role and responsibilities in keeping the Netherlands accessible and in motion. Our key focal point is the main Dutch rail network. But our customers don't travel by train exclusively: it's just part of the overall door-to-door journey. And we want to play a prominent role there too.

On the right track

NS has a franchise for the Dutch main rail network until 2025 and the government will be weighing up progress so far in the midterm review in 2019. Our performance in 2017 on the twelve franchise KPIs shows that we are on the right track, even if the services on the HSL will continue to demand our full attention over the coming years. Together with ProRail and the Ministry of Infrastructure and Water Management, we are implementing numerous improvement measures on that line. It is very important to NS that the HSL should be a success. We are going to keep working at that.

Our focus on the main rail network and the good performance on it do not mean we will not help think about public transport in the regions. Passengers in the regions do not always get an optimum product, even though the vast majority of people have journeys of less than 30 kilometres. There are bottlenecks in the regions, including ones in the infrastructure; there are issues on the table about the best approach to door-to-door travel and there is a mish-mash of franchise agreements. NS wants to be more mindful of this and is aiming to play a key role in multimodal transport – train, bus and public transport bicycle – together with its partners. Smart solutions will let us improve public transport. In the spring of 2018 I will be visiting all the provincial authority representatives who have traffic and transport in their portfolios to hear what they have to say. More tailored solutions in the regions are also important to NS.

But we have to get away from the ideological debate about market forces on the railways. The debate has to be about the fact that any further fragmentation is only going to add to the complexity of the network. In Japan, each type of train has its own tracks. In the Netherlands, though, there is a network of tracks over a hundred years old on which NS delivers world-class performance every day. That does not give us licence to stop making improvements, but we should be looking at the cohesion, the quality and the efficiency of the main rail network. NS wants to be able to maintain that network and perform well, showing that this is what is best for passengers and for the Netherlands. When we said farewell to the Zwolle-Enschede and Zwolle-Kampen lines in December 2017, we lost two nice routes. Fortunately we're still allowed to play the regional game and NS will be bidding again in future for regional lines.

Improvements for passengers

We introduced numerous new services and products in 2017 that make travelling by train more attractive. For instance, we started a trial on 6 September running six Intercity trains an hour between Amsterdam and Eindhoven in order to handle the expected passenger growth. An important innovation. This pleases substantial groups of passengers, but there are small groups who will be disadvantaged. It is worth noting the huge degree of involvement both in the

spotlights and behind the scenes that made this trial a success. The NS staff achieved this with a great deal of dedication, something I'm very proud of. During the first day of the trial, I came across a driver who had come in from Zwolle on his day off to see how it was going. The trial was a success and from the 2018 timetable onwards there will be an Intercity every ten minutes on this route, the busiest in the country.

Our introduction of new trains has been a visible quality improvement. The trains provide more seating capacity. The FLIRT trains have started running on the Dutch rail system. Passengers are pleased that there are toilets once again in the Sprinter trains and that the sills have disappeared. There was healthy interest in our mock-ups of the Intercity New Generation and Sprinter New Generation. We also saw Dutch people's great interest in railway matters at the open days that we organised in the Maastricht and Amsterdam Watergraafsmeer workshops. Thousands of people came to look: fathers, mothers, children... It made me think of how I used to go to Schiphol as a child, spotting the latest planes. I just had to see them!

We did our very best again in 2017 every day to offer the best and most sustainable transport possible. It's no coincidence that we have been running entirely on green power in the Netherlands since 1 January 2017. At the same time, we are working on the 'mobility of the future'. It therefore remains important to stay informed about the developments in both mobility needs and technological progress, and to be able to translate those into attractive products. NS develops a great deal itself, but we also look closely at how the customers are developing. You have to keep pace with them. People change the world. Whether it's people swapping their cars for an electric bike for transporting their kids, or making the switch from mobility solutions being 'available' rather than 'owned': it all impacts how people move about. Companies like Uber show how quickly you can develop services, with variations in the transport during the journey: instead of taking two people to the same point, it can be four people to different destinations.

I believe in cohesion, in investments that genuinely mean progress. That can undoubtedly mean the train, but also sometimes cars, light rail, bus transport or bicycles. Or maybe there are occasions when it's better to put money into the surrounding area, like bike parking at the stations.

Urban icons

Stations are urban icons and a renovated station returns something valuable to the city. Just take a look at Den Haag CS, Amsterdam Centraal, Arnhem Centraal, Delft, Breda, Rotterdam Centraal – every one of them a jewel. Good facilities are part of that. At the stations, NS looks for the right balance between innovation and products that suit the passengers. Thanks in part to the input from our Works Councils, we were able to adapt our retail strategy a little last year. We are continuing to offer some things ourselves – snacks, drinks, day-to-day shopping – and leaving the rest to the market. AH to go, Kiosk, Stationshuiskamer, Railcatering and Julia's are remaining within NS. In addition, NS is still making sure that the stations are clean and safe. The smaller stations are also very important for local residents, and so they matter to NS too. Together with ProRail, we have brought life back into smaller stations in 2017 as well. It does so much good for the local community. In the next short while, we will be tackling Harderwijk, Assen, Apeldoorn, Driebergen-Zeist and Maastricht.

The success of the bike

The station is one link in the door-to-door journey. NS has an important role in the overall journey. Take the bicycle: nearly half of all people cycle to the station. We help these passengers by providing facilities such as good bicycle parking. In Utrecht, we opened the first part of a new bicycle storage facility. When all of it is in use, by the end of 2018, it will in fact be that largest such facility in the world. The bike is also important for the last mile – look at how successful OV-fiets, the public transport bicycle, has been. It is a story that has attracted people from all over the world, as I discovered at the international bicycle congress Velocity in

the spring of 2017. There are a number of locations where demand is outstripping our capabilities, though. Sometimes we have to say: "Closed due to success". We will be adding another 2,000 new bicycles to the scheme in 2018 and we are looking at a totally new plan for rental and payment. We want to cooperate with other parties. The municipalities are more than eager: they want to cut down on the bikes scattered everywhere. Cycling is healthy, and the cities want cleaner air.

Making pleasant trips possible from door to door demands flexibility. Radboud University in Nijmegen is for example going to change the lecture schedules for first-years. That will add a little more flexibility and space in the city's public transport and on its cycle paths. Or take the province of Groningen, the door-to-door policy champion. As the tendering authority, Groningen has an overall vision for bus, train and transport for the disabled and the elderly: "You can get there too." That shows their drive. We at NS are ready to pick up the gauntlet.

Efforts by our staff

Whether NS is a success depends on the efforts and dedication of our staff. Our colleagues were distressed by Fyra and the irregularities in Limburg, but we have pulled through. I saw at our workshop in Onnen how we are now reaping the benefits of the change that the structure of our company underwent. The linkage between running trains and maintaining them is improving step by step. Where there used to be an illuminated sign at the workshop with details of the number of train sets currently withdrawn, without any relationship to the trains being run, there are now screens saying when they have to be back in service by. That creates greater internal commitment as well as resulting in higher availability figures for the trains in service. This is how we are also attempting to keep improving the links between the planners in the offices and the people doing the operational work. In the 2017 timetable, there were occasions when the reality on paper meant that a driver in practice scarcely had time between shifts for a coffee and a comfort break. When drawing up the 2018 timetable, we were already looking to coordinate things better. We are making use of each other's expertise, for instance.

NS staff are deeply involved with their work, the company and our future. We held constructive talks with the Works Council, about topics including NS's strategy. The directors and the employee participation bodies have made some genuine advances in how they cooperate. I would like to thank the Works Council for the confidence they have shown. We agreed a new collective labour agreement with the unions. It contains agreements about items such as pay rises, part-time retirement and investment in healthy working.

We always pay attention to safety on the spot for our staff and passengers. We make substantial investments in that and we regularly hold what are called 'safety walks' at stations. Over the last year, I am pleased to say that the number of reports by staff of incidents of aggression went down and the number of times signals were passed at danger remained steady.

After 'Limburg'

At the end of December, the court issued a ruling in the criminal proceedings resulting from irregularities in the tender for regional public transport in Limburg. The court cleared NS and the individuals concerned of forging documents and of bribery not involving public servants. The judge issued a clear ruling. There are things that went wrong, but there is no question of criminal offences. The public prosecutor has lodged an appeal. NS took action immediately after 'Limburg' and introduced measures to prevent any recurrence in the future. Last year, we continued our work to bring governance, risk and compliance structurally up to the required level and to encourage appropriate conduct within NS. The Netherlands Authority for Consumers and Markets (ACM) ruled that the NS contravened the Competitive Trading Act during the tender process and imposed a fine. By submitting a notice of objection, NS has asked the ACM to reconsider its decision.

Meanwhile, abroad...

Our subsidiary Abellio increased its share of the British rail market in 2017 by winning the West Midlands franchise, along with its partners. Abellio is now the fourth largest carrier on the railways in both the United Kingdom and Germany.

Financial position

NS has both social and financial objectives. We are currently investing heavily in new trains. We had a positive financial result in 2017, but healthy business operations with sufficient returns remain a challenge. We are giving it our full attention. The financial position has to improve in the longer term, primarily by improving the results. Good operational performance, satisfied customers and committed staff are all prerequisites for this.

Keeping investing in passengers

NS can look back on 2017 with a suitably modest degree of pride. We are getting back to our best. In addition to the good results, 2017 was once again a year in which we invested in our passengers. We want to retain their trust and build upon it. We have to keep delivering top-class performance every day to serve our passengers' interests. Train travel is like water from a tap: it's simply got to keep flowing. NS has to make sure every day that trains run on time and that passengers are carried to their destinations. NS is sharply focused again, with its passengers central. Working closely with the other responsible parties, we are examining how the tracks can best be used, including for example looking at light rail. There are plans for mobility in the coalition agreement. Notwithstanding, the sector asked the new cabinet for €1 billion structurally for the railways, but we were only allocated €800 million as a one-off. The railways got a meagre share compared with the roads, although there *is* more money for the regions.

NS connects the Netherlands. We have shown over the last two years that we can do what we promised on the main rail network. In the future, we will also be making more efforts in the regions for our passengers. And this will in fact be in cooperation with other public transport companies and looking at solutions that use bicycles, buses and cars as well. After all, we have to look at the customer's entire journey.

Finally, I would like to thank everyone at NS, the employee participation bodies, my colleagues on the Executive Board, the Supervisory Board and our shareholder for their huge efforts and dedication in 2017 and for the trust that they have shown in us.



Roger van Boxtel

The profile of NS



People want to be able to travel problem-free: quickly, safely, conveniently and at any time. NS is helping to make that possible. To achieve this, we are extending our scope beyond the train. We are a broadly based service provider, enabling our passengers to seamlessly combine their social, recreational and business goals. 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 employees – 36,000 staff, 33,000 FTEs at the end of 2017 – 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 €5.1 billion from that, 89% of it coming 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. Our activities abroad earn money, teach us how we can improve our services, and prepare us for the possibility of further deregulation of the railway market. This is how they help us achieve our operational objectives and benefit our passengers in terms of an even better door-to-door journey.

Our organisation

NV Nederlandse Spoorwegen is at the head of a group that includes NS Operatie (approximately 13,000 staff), Commercie & Ontwikkeling (1,000), NS Stations (5,000, including retail) and Abellio UK (13,000), Abellio Germany (1,500) plus staff departments such as HR, Finance and IT.

NS Operatie is responsible for rail transport on the Dutch main rail network, including the 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 and cleaning of our trains in the Netherlands, as well as modernising them and making them more sustainable.

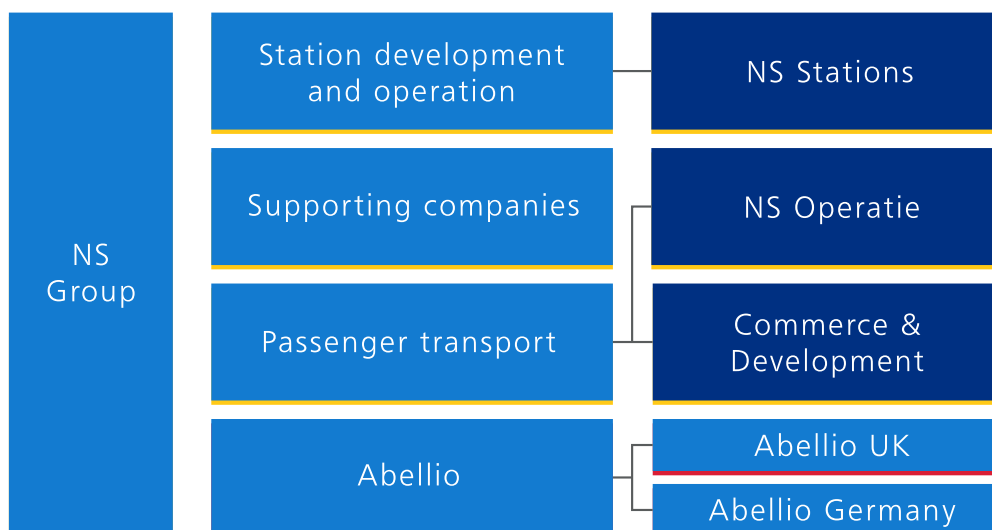
Commercie & Ontwikkeling handles the development of train services and timetables in the medium and long term, as well as the sales and service activities associated with domestic and cross-border train transport. C&O is also responsible for customer service.

NS Stations works to create a good network of 410 stations, large and small. Together with ProRail, the authorities and all the carriers, NS Stations aims to make the journey and the time spent in and near the station as pleasant and comfortable as possible. Over recent years, NS Stations has worked with ProRail and various municipalities to rebuild major stations, emphasising that the stations should be ‘clean, intact and safe’. All activities – shops, services, facilities and transfer businesses – must make a contribution to improved passenger perceptions of the station and the journey.

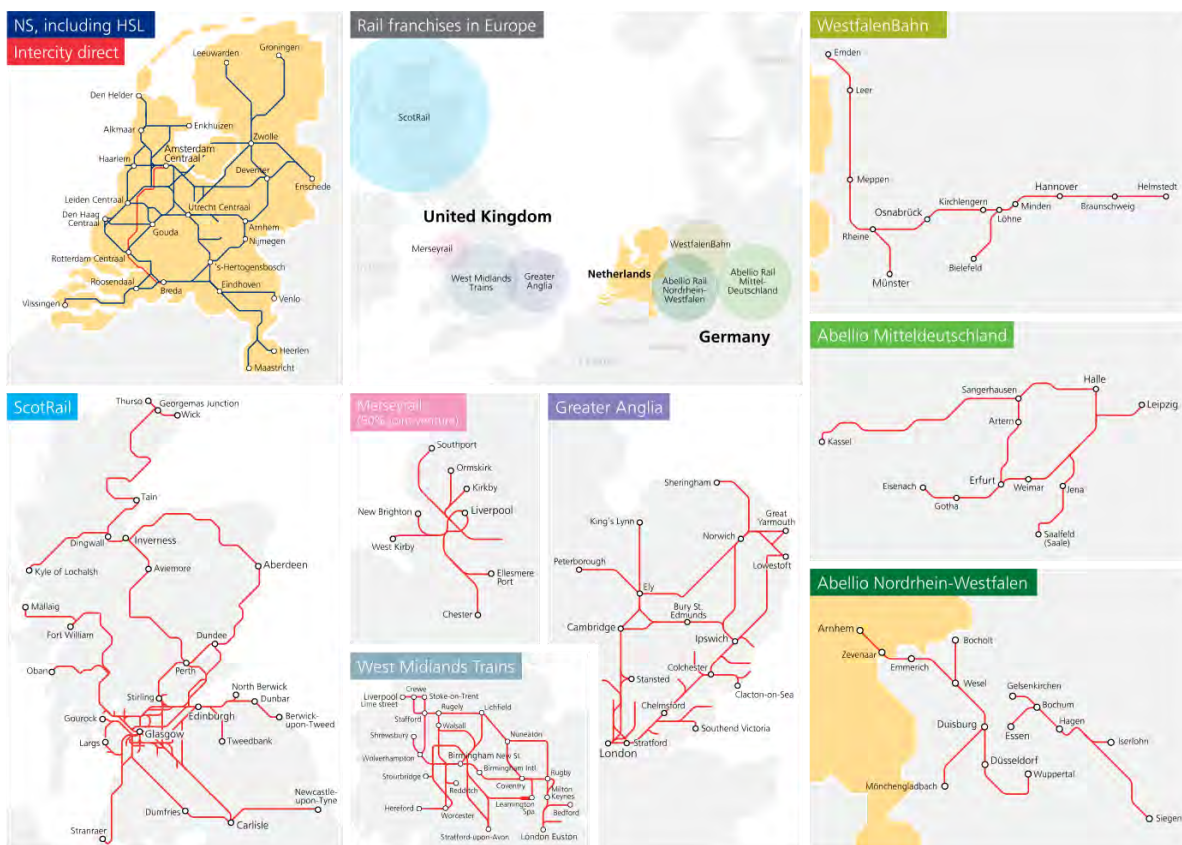
Abellio UK acquires and runs rail and bus franchises in the United Kingdom (Greater Anglia, Merseyrail, ScotRail, West Midlands, Abellio UK Bus). 13,000 staff in the United Kingdom work together to transport 800,000 passengers a day. The West Midlands franchise was added to the portfolio at the end of December.

Abellio Germany is only involved in acquiring and operating rail franchises. In 2017, Abellio Germany was running six franchises in six contiguous federal states. Abellio Germany carries about 114,000 passengers a day. There are 1,400 employees working for Abellio Germany. At the end of December, Abellio became the sole owner of WestfalenBahn, which operates in North Rhine-Westphalia and Lower Saxony.

Organisation chart



Rail franchises in Europe



About the scope of this report

NS is a company that has its roots in the Netherlands and has a single Dutch shareholder, the Dutch State. In this annual report 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 clear from our regular discussions 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 liberalisation of the market. Activities abroad have to contribute to the interests in the Netherlands. This annual report, published on 1 March 2018, has been written primarily for the Dutch stakeholders. They say that they believe our activities in Europe are a materially relevant theme. That is why we have included Abellio's results abroad as a separate chapter. The focus in the franchises is mainly on the operational performance.

In addition to the financial statements and the combined independent auditor's report on them, the NS Annual Report for 2017 contains other information, comprising:

- The report by the NS Executive Board that is included in the chapters Profile of NS, Foreword by the CEO, Our strategy, all parts of Activities in the Netherlands and Operations abroad, Outlook for 2018, Corporate governance, Managing risks, Finances in brief, Our impact on the environment and on society, NS as an employer in the Netherlands, Dialogue with our stakeholders, and Scope and reporting criteria
- The report by the Supervisory Board, included in the NS Group section, and
- other information pursuant to 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. The financial statements.

Our strategy



The Spoorslags Beter strategy for 2016-2019 is allowing NS to concentrate on its core activities with the aim of improving performance for passengers. NS is focusing on achieving the agreed franchise KPI targets for the main Dutch rail network in 2019 and its foreign activities in the United Kingdom and Germany.

Our mission, vision and ambition

Our mission is to make sure passengers feel a connection with NS. Our main ambition is to work with partners to let passengers control their door-to-door journeys. This is our contribution to affordable and sustainable mobility in the Netherlands.

Our goal for 2019 is to deliver optimum performance for the midterm review by making passengers, passengers and passengers our top priorities. In the coming years, we will continue to work on strengthening sustainable mobility in the Netherlands as part of our role in society. In everything we do, one question takes top priority: will passengers benefit from this? We aim to deliver a very good sustainable and robust train service and offer a seamless door-to-door journey experience. We will also give passengers the ability to be in control and enjoy freedom and respect. To make this possible, we are concentrating on three core activities in our *Spoorslags Beter* strategy:

1. **Better performance on the main rail network, including the HSL and the associated international train services**

This means better train journeys, greater reliability and cleaner trains, as well as investments in new trains. We are also increasing the frequency of services.

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. **Contributing to 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, whereby convenience takes priority. We align the timetable as much as possible with bus, tram and metro services, offer transport chain services such as the public transport bicycle (OV-fiets) and Zonetaxi and ensure that the stations can be 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 journey.

NS is investing more than €4 billion in the Netherlands over the period through to 2022 in these core activities, for example purchasing new trains, offering better journey information and better Wi-Fi, introducing new payment methods and making further improvements to stations.

Abellio

We will be expanding the foreign operations of our subsidiary Abellio in a targeted fashion, and with due consideration of the entrepreneurial risk, in a limited number of deregulated European markets such as the United Kingdom and the German regions. This will let NS acquire experience in the European railway market. We are applying knowledge and experience acquired abroad to the benefit of passengers within the Netherlands to a greater extent than before. Abellio bids for franchises with a controlled risk profile.

Main objectives

To achieve its ambition, NS is focusing on five primary 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. A return on equity of 5.5%
5. Effective organisation

Strategic themes

In order to realise the main objectives for 2019, NS is focusing on eight strategic themes¹. 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 our public transport partners and others.
- *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 and reliable services.
- *Perfect execution*: Our basic performance for passengers will improve continuously through fixed-role execution in accordance with plans, fast decision-making and responsive journey information during disruptions, and continuous improvements to the execution.
- *New and upgraded rolling stock*: Our passengers will see more seating and experience more comfort due to the smooth introduction and effective deployment of new and upgraded rolling stock in the service.
- *Organisational improvement*: NS is developing into a more dynamic organisation with more focus on the results, with effective leadership acting in accordance with the agreed standards 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 – Earn, Learn, Prepare*: Abellio is providing lasting results and helping NS to learn from its experience abroad and the preparations for any 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.

Linking strategy and objectives

NS recalibrates the strategic themes in the business planning round every year and makes adjustments where necessary. For each theme, the business units develop action plans in which the goal is 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 contribute to achieving our objectives.

¹ The Executive Board discusses the strategic themes every year. For 2018 the Executive Board added the theme *Improvement in the result and financeability* and has split the programmes and projects from the theme *New and modernised rolling stock* between *An attractive physical offering* and *Perfect execution*.

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 helping 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 a number of 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 *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.

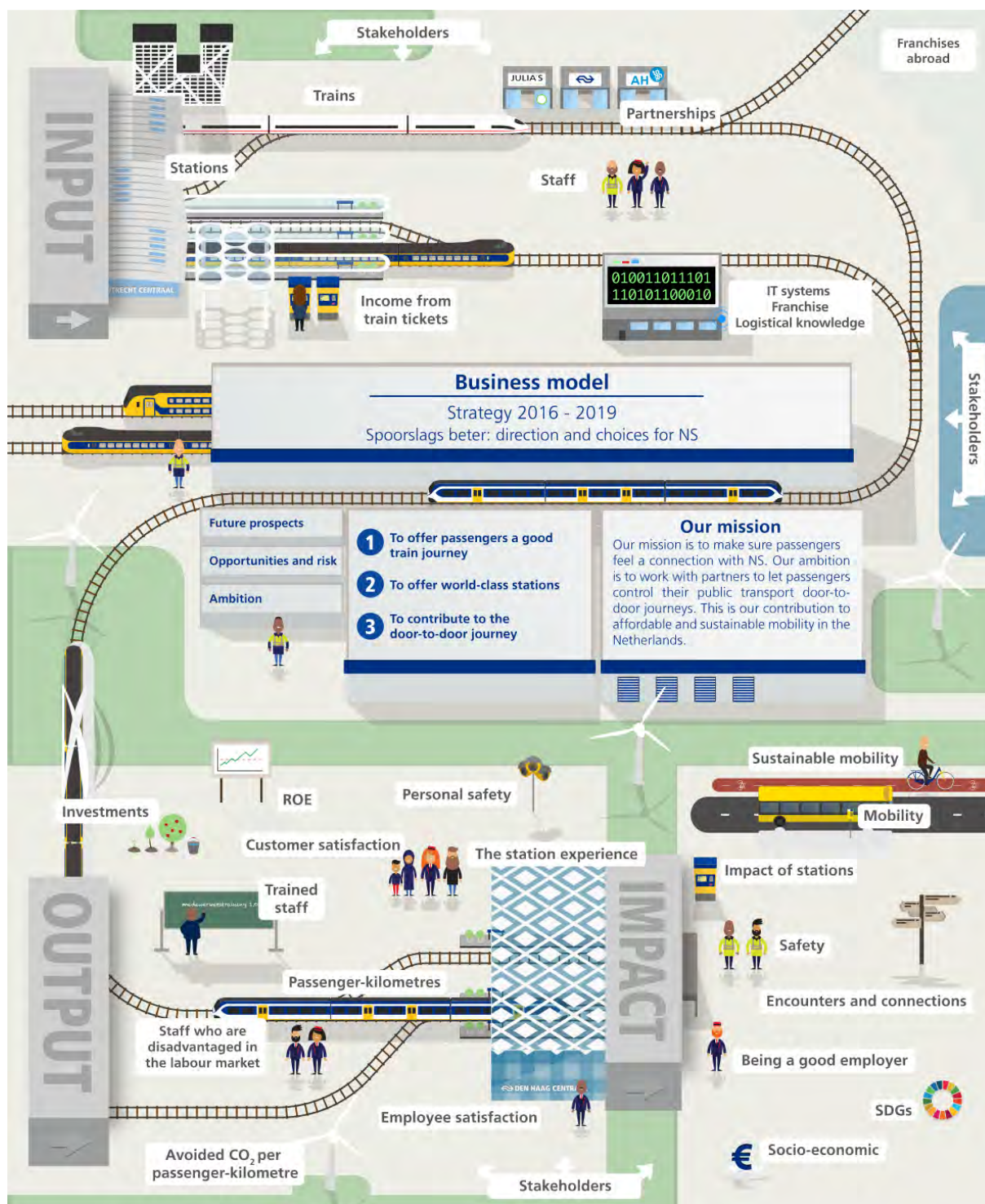
Output

The activities in our business model have a variety of internal and external results. For example, in addition to our financial results, we carry an average of more than 650,000 passengers in over 1.2 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 exert an environmental burden because of the raw materials we use. If we are to be able to keep 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. This means that we can be sure that the social costs of a train journey remain less than for a car journey and – 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



Activities in the Netherlands

2017 Results



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. Even so, things are yet not good enough on every route every time. We want to report openly and transparently about our performance.

Our report is in chapters that largely relate to our strategic themes:

1. An attractive physical offering
2. Optimising the customer experience
3. World-class stations
4. Performance of HSL South
5. Perfect execution
6. New and upgraded rolling stock
7. Organisational improvements
8. Safe and sustainable travel
9. Abellio

Minimum and target values

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

Target value: Value for the minimum 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 assesses 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 baseline and target values for the period 2020-2024 will also be determined during the midterm review.

Changed indicators

In 2017 the standards for '5-minute punctuality for passengers on the main rail network', '5-minute punctuality for passengers on HSL South' and 'Quality of connections with other carriers' were changed while retaining the overall level of ambition. This section describes these changes.

To control the daily train service, ProRail traffic control used the IT system *Verkeersleidingsysteem* (VKL, Traffic Control System) until early 2017. On 22 January, ProRail transferred to a new system, *Verkeersleiding Operationeel Systeem* (VOS, Traffic Control Operational System). 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. In view of the different outcomes, the Ministry of Infrastructure and Water Management made the changes set out below to the baseline and target values based on Article 17.7 of the franchise for the main rail network for 2015-2025. These changes apply as of 2018, as well as retroactively to 2017. This change was discussed with the stakeholders and audited by KPMG. This conversion had neither a positive nor a negative effect on passengers.

Performance indicator	Changes due to a change in the measurement system	
	minimum value ^[*]	target value ^[*]
Punctuality for passengers (to 5 minutes) on the main rail network	-0.3%	-0.2%
Punctuality for passengers (to 5 minutes) on the HSL-South	-0.4%	-0.2%
Quality of connections with other carriers	+0.3%	+0.4%

* Change between the 2017 and 2018 Transport Plans

Changes in 2018

As of 2018, in consultation with the Ministry of Infrastructure and Water Management, a number of changes were made to the performance indicators. These changes are mainly technical in nature and are driven by the interests of passengers, external changes or upgrades to IT systems. The changes in these performance indicators already had an effect on the results in 2017, which is why the standards have also been adjusted retroactively.

Journey information in the train sector

As of 2018, the journey information is no longer compared against the annual plan but against the current timetable, as determined just a few days beforehand. This improves the consistency between the journey information channels such as apps, the website and screens at the station and reduces the number of unnecessary alerts for passengers.

Quality of NS connections to other carriers

As per 2018, it has been decided to update the list of changeover stations and at the same time expand it from the 18 most important stations to all 28 stations in the main rail network where passengers can transfer to a different rail carrier. Because the change also has an influence on the realisation figures, the minimum value and target value have been adjusted upwards without changing with ambition level ('ambition-neutral').

An attractive physical offering



The top priorities at NS are passengers, passengers and passengers. Our passengers on the main rail network will be offered a rail service that meets their requirements by giving them a seamless and robust door-to-door journey. Together with our partners in the public transport sector, NS is working on improving all elements of the train journey.

Punctuality

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Punctuality for passengers (to 5 minutes) on the main rail network*	91.6%	90.6%	89.2%	91.1%

* Value has been amended as a result of technical changes that have been implemented in the performance indicators

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 the connecting trains. Punctuality for passengers (to 5 minutes) for the main rail network was 91.6% in 2017 (90.6% in 2016). The increase is in part due to the new timetable, which we are getting ever better at implementing and which is more reliable. This allowed us to deploy trains more according to plan. In the first two months of the year, punctuality for passengers was still lagging behind due to teething problems in the new timetable, which is very different to the old one. We solved most of these problems by February. For example, we changed connections that were correct on paper but were not feasible in practice. Despite all that, we had a large power failure in Amsterdam in January and disruptive winter weather that affected train traffic in December. In comparison to the previous year, our passengers experienced less inconvenience from work on the track in 2017.

High-frequency Rail Transport Programme

Punctuality is one of the prerequisites for running trains at a higher frequency. NS and ProRail held a trial from September to December in which passengers between Amsterdam, Utrecht, 's-Hertogenbosch and Eindhoven could catch an Intercity train every ten minutes. The trials were key preparations for the new timetable that came into effect in December. Passengers on this route can now choose from six Intercity trains an hour. This has increased the capacity and resulted in less crowded trains. The trial led to overwhelmingly positive reactions among passengers and employees of NS and ProRail. We will be monitoring performance on the route carefully in 2018 to pick up points for improvement quickly. NS and ProRail did a study together into potential further corridors where an increase in the frequency of Intercity trains per hour is desirable. The Schiphol-Utrecht-Nijmegen and Breda-Eindhoven corridors were shown to be the corridors that were most urgent.

Quality of connections with other carriers

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Quality of the NS connections to other carriers at the major hubs*	94.5%	94.1%	93.7%	95.6%

* Changed values as a result of technical changes that have been implemented in the performance indicators

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 the 18 most important changeover stations. This was 94.5% in 2017 (94.1% in 2016). Just like punctuality for passengers, this indicator shows that (after teething problems at the start of the year) the new timetable is very feasible in practice and the connections to other carriers are working as they should. From 2018 we will be measuring this at all 28 changeover stations.

Crowding on trains

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Seat availability on the main rail network*	95.1%	95.1%	94.3%	95.5%
Top ten crowded trains	2.4%	2.4%	4.9%	4.0%

* Changed values as a result of technical changes that have been implemented in the performance indicators

Passenger numbers grew by 0.8% in 2017, partly because of the upturn in the economy. That is why trains are getting increasingly overcrowded, especially in the traditionally busy autumn period. Trains are often also crowded at peak times. NS has been taking measures for this for some time. As a result, the number of complaints last autumn decreased compared to 2016. From the end of August until November, there was an external evaluation of the Transport Capacity Programme for the Ministry of Infrastructure and Water Management. This showed that NS has implemented all the agreed measures.

Seat availability at peak times on the main rail network

In 2017 passengers had the same chance of a seat as in 2016 (95.1%), despite the increased number of passengers. There were more trains available on the track in 2017, due for instance to more efficient maintenance and the influx of FLIRT trains. In 2017 we offered a record number of seats: 249,000 (2016: 245,000). To be able to accommodate further passenger growth, we will have to run more or longer trains on the busiest routes. In the timetable for 2018 we are running more trains on the Amsterdam-Eindhoven route, for example, increasing the capacity. On other routes with bottlenecks we are making the trains longer where possible. However, the number of passengers in some peak-hour trains is still growing while the trains have already reached their maximum length. We are also running up against the limits of the infrastructure, where not only platform length but also the space for shunting and coupling limits the deployability of trains. We are working on this with ProRail, the Ministry of Infrastructure and Water Management and regional authorities. We are tempting passengers to spread their journeys at peak times and travel on quieter trains at the start and end of the rush hour or outside it. We are doing this by informing passengers better about the expected crowding in the Journey Planner and by rewarding them for avoiding busy trains, for example via the My OV app that was expanded to 10 busy routes in 2017. You can save points for items such as coffee or a gift voucher.

In the top ten busiest trains, the crowding figure for 2017 was 2.4% (2.4% in 2016). This percentage is the probability of a passenger being unable to get a seat on one of the preselected ten busiest routes during the rush hour.

Accessibility

NS wants everyone to be able to travel without any problems. We have been working with the Ministry of Infrastructure and Water Management to make travelling by train more accessible. Last year we introduced assistance services at ten stations ahead of schedule. More passengers with functional disabilities now benefit from assistance in getting on and off trains. Since 10 December 2017, passengers can also book boarding assistance at all stations with assistance services, from the first through to the last train. In addition, the new FLIRT trains have retractable steps that make it easier to get on and off the train. Other train types will follow over the next few years.

International connections

Together with its international transport partners, NS connects cities and regions together in Germany, Belgium and France. Last year, the number of journeys sold rose by 6.4% to over 3 million international journeys.

Introduction of IC Brussels on the HSL South

NMBS and NS are busy with the preparations and trials for running the Intercity Brussels service on the high-speed line, aiming to start this train service as of 9 April 2018. This train will run 16 times a day, as it does now: The departure and destination station will be Amsterdam Centraal for 12 of those trains, with 4 trains going to and from Den Haag HS. This will cut half an hour off the journey for passengers between Amsterdam and Brussels.

Thalys

NS and its partner Thalys have further expanded the transport capacity to France by running double train sets more often.

ICE International

Just like with Thalys, we are expanding the ICE offering to Frankfurt by running double train sets. The loss of the CityNightLine from DB has been compensated for by alterations to the early and late ICE International service timetable.

Eurostar

Eurostar is starting a direct train link from 4 April 2018 onwards from London to Amsterdam. There will still be a changeover at Brussels Midi when travelling to Britain until passport facilities are arranged at the Dutch departure stations. Terminals for this are under construction at Amsterdam Centraal and Rotterdam Centraal. NS has given drivers and train managers courses on how to run these trains.

Optimising the customer experience



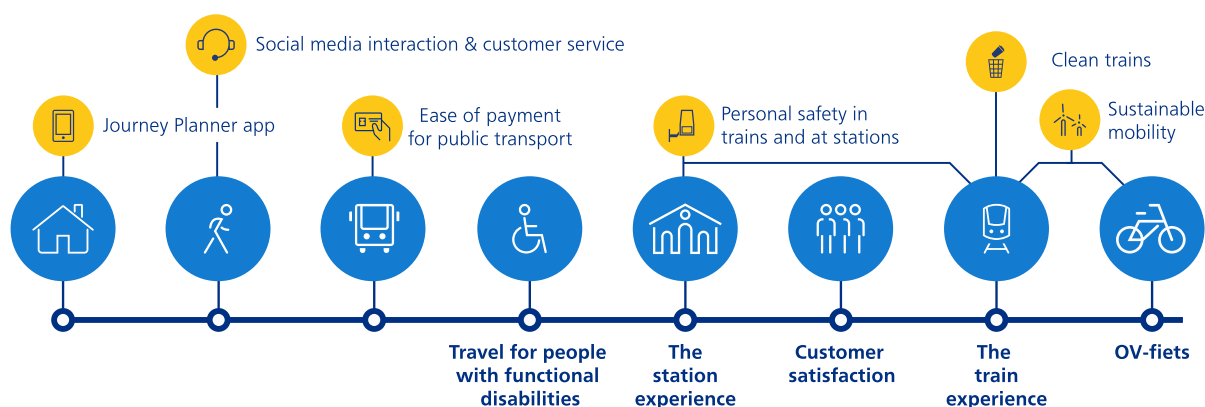
The three key requirements for passengers are control, respect and freedom. These determine how they experience their train journeys. We want to optimise the journey experience by providing a valuable product and personal and intuitive service.

Customer satisfaction

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
General customer satisfaction with the domestic main rail network	80%	77%	74%	80%

In 2017, passengers on the main rail network were more satisfied with travel by train than in 2016. 80% of the passengers gave a score of 7 out of 10 or higher, as opposed to 77% in 2016. They also rate the hospitability of NS employees, the cleanliness of trains and stations, and stations in general higher. The increase in customer satisfaction follows from other operational KPIs on which we scored well, such as punctuality for passengers and the quality of journey information. An exception is the satisfaction with the availability of seats; that has not changed.

Customer satisfaction



Hospitality at the station and on the train

Customer satisfaction	Realisation in 2017	Realisation in 2016
Approachability of NS staff aboard the train	82%	77%
Friendliness of NS staff aboard the train	91%	91%
Approachability of service personnel at the departure station	84%	80%
Helpfulness of platform/concourse service personnel	81%	79%
Friendliness of service personnel at the departure station	83%	82%

Passengers were more satisfied with the hospitality of NS. It is always a focal point of our employees and their managers on the train and at stations. For example, in 2017 we organised hospitality workshops and deployed hospitality ambassadors who exchanged experiences, such as with announcements in the train and providing information in the case of disruptions.

Gender-neutral announcements

NS thinks it is important that everyone feels welcome. Starting from the timetable for 2018, we have therefore chosen to address passengers with "hello passengers" instead of "ladies and gentlemen" over the public address system and in correspondence.

The train experience

Train Experience Monitor	Train	Train journey
Sprinter	79% (2016: 77%)	83% (2016: 81%)
Intercity	85% (2016: 85%)	86% (2016: 87%)

NS uses the Train Experience Monitor every year to measure the scores that 24,000 passengers give for the quality of the trains and the journey. It helps us improve the services we provide to our passengers. The passengers' assessment of the Intercity trains remained stable compared to a year ago. In both 2016 and 2017, 85% of our passengers gave a score of 7 out of 10 or higher for the Intercity trains. The assessment of the Sprinter trains saw a rise from 77% in 2016 to 79% in 2017, primarily due to the arrival of the new trains.

Clean trains

NS wants its passengers to be able to travel in clean trains via clean stations. That is why we clean them daily. Last year, 62% of passengers gave the cleanliness of trains a score of 7 out of 10 or higher (58% in 2016). Having cleaners on board during the train journey ('on-track care') resulted in numerous positive reactions from passengers. The number of trains that we clean completely on the inside every night has also increased. We have also improved our cleaning performance with innovation, by using special foils and coatings. We have also worked on preventing trains from running before they have been cleaned and on 100% service at the service centres. This initiative by the service centres started in 2017 with the goal of improving the service processes, so that trains are delivered clean and in order, according to plan. In 2018 we will be focusing on avoiding any negative outliers. Customer satisfaction with the cleanliness of stations also increased, from 75% in 2016 to 78% last year.

Customer Service and social media interaction

Number of contacts per month	Social media	E-mail	Telephone
285,200	63,800	32,800	163,800

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. Customer satisfaction for the customer services provided by NS was 7.5 out of 10 for 2017. That is higher than in 2016 (7.4).

My NS has been improved

The personal My NS environment for passengers on the NS website was improved further last year. The website has been made clearer and more personal, and it offers passengers a better picture of the services offered by NS. They can view their travel history and make requests for refunds if they forgot to check in or out. The look and feel of the My NS environment matches the rest of ns.nl.

Ease of payment in public transport

Passengers appreciate being able to pay for their journeys quickly and easily. We made various improvements with that in mind. For example, we introduced travelling on account for a small group of existing customers under the name NS Flex. They then pay for their train journeys afterwards. If the test is successful, a wide-scale roll-out will follow in 2018. In addition, in collaboration with the public transport sector, telecommunications providers and banks, we ran trials for paying via mobile phone and debit card. Payment via mobile phone will not be developed further for the time being. Examples of other improvements:

- It is now also possible to request refunds online for e-tickets in the event of delays.
- NS can automatically correct some forgotten checkouts because it is now connected to Translink's national 'missed checkout' service.
- The NS Extra service has been expanded to include campaigns on routes where work on the track is taking place.
- Customers can immediately sign up for NS Extra when purchasing a season ticket online.
- Tickets on ns.nl and in the Journey Planner app are now available as mobile tickets.
- When purchasing a season ticket, you can immediately choose to use OV-fiets (the public transport bicycle) or 24/7 bicycle storage.
- The ticket machines at stations have been upgraded.

Use of the public transport smartcard

Around 650,000 passengers every day use their public transport smartcards to check in and out. The NS Extra service allows passengers to activate a 'check-out alert' and makes it easier to cancel a season ticket. In 2017, 86% of our passengers gave a score of 7 out of 10 or higher (83% in 2016). The increase is partly the result of people getting used to the smartcard and the system, and partly due to improvements made by NS. For example, passengers can view transactions via the Journey Planner and no longer have to pay a fee to reduce the balance on their card at a ticket desk.

As of 2017, NS no longer carries out separate research into satisfaction with the public transport smartcard. This programme ended last year and with it the need for extensive reporting. Relevant questions have been included in existing satisfaction surveys.

Pleasant use of time

Customer surveys show that passengers were able to spend their travel time better and more pleasantly than in 2016. We have increased the Wi-Fi speed from 450 to 600 Mbps. We also set up the 'Experience Trains' programme last year to offer passengers something surprising during the journey. Examples include the train cinema during the International Film Festival in Rotterdam, the Pinkpop Express and the special carriages during the GLOW event in Eindhoven. We have also started the 'Inspiring Journeys' programme to provide passengers with inspirational facilities (in terms of both the interior and a digital environment) during the journey. During the Dutch Design Week, we experimented with innovations such as *The Hood* (a new approach to the train entrance), *Luisterruit* (podcasts for the train), *MindfulNS* (relaxation), *Spoorwijs* (to encourage social interaction) and *Travel fit* (to facilitate active sitting and standing). Many customers have expressed appreciation for the initiatives in the Experience Trains and Inspiring Journeys programmes.

Personal safety

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Customer satisfaction with personal safety on the train and at the station	88%	87%	81%	83%

Customers' perception of safety at stations and in trains increased in 2017: 88% gave a score of 7 out of 10 or higher, as opposed to 87% in 2016. Last year we took additional measures to improve personal safety further. Since June, there have been two guards after 22.00 on trains on the evenings when a lot of people go out. We recruited additional chief guards for this purpose. On other evenings we deploy what are called 'flexible service and safety teams'. Extra Safety & Service staff were recruited for this. At the end of 2017 we investigated the effect this measure was having on the personal safety of passengers and employees. The results of this will be known in 2018. We also improved our recording methods, and (in consultation with ProRail, the police and the National Coordinator for Counterterrorism and Security) we updated measures to combat terrorism at various points in our security system.

In order to improve personal safety for passengers and staff at stations and in the trains, NS is installing access gates at stations. The number of stations with access gates was 74 at the end of 2017. Last year the access gates came into use at two major stations, Amsterdam Centraal and Utrecht Centraal. This went smoothly at both stations. Passengers say that the access gates make them feel safer and that they expect this to result in fewer fare dodgers. The access gates also ensure that passengers do not forget to check in or out.

World-class stations



We offer various facilities at the 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 has improved

Together with ProRail and the authorities, NS Stations rebuilds and renovates many stations. The experience and ease of changing trains are the central concepts. NS Stations offers visitors various facilities at the stations, depending among other things on station size, so that they can spend their time there comfortably and make the most of that time. With accessible and hospitable staff, journey information about public transport as a whole, good access and easy changeovers to bus, tram, metro and public transport bicycle. The station experience is also important to NS Stations because it accounts for 25% of the general customer satisfaction figure. In 2017 the increase in customer satisfaction nationwide with stations continued: the percentage who gave a 7 out of 10 or higher increased from 70% in 2016 to 73% in 2017. The large stations (top 47) achieved a score of 77% in 2017 and the smaller stations scored 64%.

A hospitable and pleasant stay

Together with ProRail, the authorities and commercial parties, NS Stations improved how time can be spent at many stations in 2017. We have invested in facilities that improve the level of hospitality, even at small stations. Examples of these are the bicycle and car parking, 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. Since last year, every station has also had its own station manager.

Improved waiting area facilities

In 2017 the waiting area facilities at 11 stations were upgraded. A new *StationsHuiskamer* (Station Living Room) opened at Driebergen-Zeist station in 2017, bringing the total number of Station Living Rooms to 11. Station Living Rooms offer visitors a pleasant area with facilities such as coffee, sockets, a toilet and journey information.

Toilets at stations

Last year, the toilet facilities at 15 locations were made safer, more comfortable and more accessible. At larger stations NS Stations awarded management of these toilets to Sanifair through a franchising tender. Three locations will be converted to the 'Sanifair concept' in 2018. They are supervised by an employee and cleaned frequently.

Clean stations

NS Stations is responsible for keeping all stations clean, regardless of which carriers stop at the station. Research shows that visitors think that some aspects of the cleaning, such as floors, benches and rubbish bins, are more important than others. Extra attention to these aspects is part and parcel of a greater customer focus.

The winter measures were optimised in the autumn of 2017 making it easier for cleaning companies to respond quickly to weather changes and letting visitors make optimum use the station no matter what the weather conditions.

Stations undergoing renovations

Various major stations were being redeveloped over the course of 2017. NS Stations and ProRail worked on the station underpass between the north and south sides of Eindhoven station. The station will be opened officially early in 2018. In Tilburg we renovated the old station concourse and put it back into use as a passage and waiting area. The roof, which has listed status, is still being renovated.

At Amsterdam Centraal, we opened the renovated former third-class waiting room in May and the corridors to the catering outlets on the first platform. Visitors will still be able reach these shops via two new staircases after the access gates have been brought into operation. In August, the Amstel Passage (which has no access gates) was opened at the eastern side of Amsterdam Centraal. Visitors can find a temporary collection of 19 pop-up stores there. A facility will be built on Platform 15b of Amsterdam Centraal for the security, passport and immigration checks for Eurostar passengers to London. We are also making the same preparations for Rotterdam Centraal.

The renovation of Leeuwarden, Heerlen, Assen, Driebergen-Zeist and Den Haag Hollands Spoor stations is well under way. The same applies for the surrounding area of Amsterdam Amstel station as a preliminary to its renovation in 2019. We also began preparations for new construction work at Ede-Wageningen and Rotterdam Alexander stations and a passage above the tracks at Zaandam station.

The public transport OV Service Shops at Schiphol, Eindhoven (north and city centre side) and Leeuwarden were renovated this year, work commissioned by NS Stations. A total of around 60 different shop renovations were carried out in 2017.

Safety at the station

In 2017 we further improved the safety for visitors and employees at stations, at the offices and in the shops at stations. 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. This lets us learn with and from each other and improve the processes.

The door-to-door journey

Bicycle parking

43% of rail passengers cycle to the station. They are able to use supervised bicycle storage facilities for around 130,000 bicycles, unsupervised facilities for more than 320,000 bicycles and more than 13,000 bicycle lockers at stations. ProRail and NS Stations are working with partners to develop bicycle storage facilities where rail passengers can easily and conveniently store their bikes. Our offering includes the first 24 hours' storage free (in 20 storage facilities), digital pointers to the free storage slots, the option of paying with public transport smartcards, and a uniform design. In 2017, NS Stations and ProRail agreed with various municipalities to provide these services at the bicycle storage facilities at stations. We also opened new bicycle storage facilities in 2017 at Utrecht Centraal, Amsterdam Centraal and Delft.

Self-service bicycle storage facilities

At Bilthoven and Heerenveen stations, NS Stations ran a trial with self-service storage facility. Elements of this are an open, spacious entrance, access using your bank card or public transport smartcard and the availability of public transport bicycles (OV-fiets). This trial resulted in higher customer satisfaction (77% gave a score of 8 out of 10 or higher, as opposed to 46% for other storage options) and more effective use of the storage facilities. NS and ProRail are going to invest €8 million to convert the 45 to 50 automated storage facilities to this new concept.

Fiets & Service

In 2017 we opened Fiets & Service centres at Groningen, Den Haag Centraal (temporary F&S), Utrecht Centraal, Leeuwarden (temporary F&S), Amsterdam Centraal and Amersfoort (temporary F&S) stations. Fiets & Service is a service format for bicycle repairs, bicycle parts and bicycle accessories. At the end of 2017 there were 22 in total.

OV Fiets

In 2017, private and corporate customers used an OV-fiets for over 3.1 million trips (2016: 2.4 million). In 2017 we recycled 1,000 public transport bicycles and expanded the total number of such bikes by 6,000 to meet growing customer demand. That brings the total number of bicycles to approximately 14,500 (8,500 in 2016). On 1 January 2017 the annual public transport bicycle season ticket was abolished and only the journey price is now charged. In the Journey Planner Xtra, passengers can see in advance whether they can hire a public transport bicycle at a station.

Car parking

7% of rail passengers use the car to get to the station and park there. In 2017, more than 1,000 P+R spaces were added and 1,059 spaces were improved. The number of P+R spaces around stations is now over 44,000 (35,000 in 2016). We have also opened three new parking locations at Zutphen, Den Bosch and Driebergen-Zeist stations. The latter is the first energy-neutral multi-storey car park in the Netherlands.

NS Zonetaxi

The NS Zonetaxi can be used from 137 locations. It takes rail passengers to and from station for fixed fares. In 2017, there were more than 10,000 new subscribers (making a total of 44,000). As in 2016, subscribers took a total of more than 18,000 trips during the last year.

Retail at the station

The principle of the NS Stations retail policy is to leave the market to do what the market does best itself. This was given further substance last year. In addition to Kiosk, StationsHuiskamer (Station Living Room) and Railcatering, NS is continuing to operate the AH *to go* and Julia's formats. The transfer of the formats for Starbucks, HEMA, Broodzaak and Smullers will be completed in the spring of 2019. Throughout the 2016-2019 strategy period, NS will continue to evaluate retail formats in order to reach justified decisions about whether those formats qualify for franchising. NS will continue to have a coordinating role so that it can offer visitors a good, varied range in the future too.

The decision to continue operating the AH *to go* and Julia's formats ourselves was based on the original principle that we wanted to let the market do the things that it is now capable of handling. The AH *to go* format is the most advanced *convenience/to-go* format of its type and it therefore very much belongs at the station. We are continuing to handle commercial operation ourselves so that we can retain the maximum influence on the broad product range that this format offers to passengers. The Julia's format meets a passenger need and is valued highly by passengers. At the same time, we note that there is no other experienced *pasta-to-go* format on the market and we believe we are able to develop the Julia's format further.

Improvements to formats

Various retail formats were revamped in 2017. AH *to go* started the conversion of 21 shops at stations in the second half of 2017. Kiosk has opened new platform Kiosks following the example of previously renovated Kiosks at the major stations. We expect to convert about thirty Kiosk outlets per year.

In 2017 Smullers invested in new automation, allowing customers to get snacks from wall-mounted machines using a credit card, debit card or smartphone. Visitors can also make contactless payments at around 300 vending machines for sweets and soft drinks at about 70 stations.

Long-Term Rail Agenda and stations

The Long-Term Rail Agenda put forward by the Ministry of Infrastructure and Water Management gives a long-term vision for structurally improving travel by train. One element is creating attractive stations for passengers, carriers and municipalities. NS's ambition fits in with these wishes. In the Approach to Station Improvement programme, ProRail and NS have set ambitions which we worked on in the programme period 2015-2017. Specifically, in 2017 we collaborated with carriers and municipalities on (among other things):

- Preparations for large, digital journey information screens at Utrecht Centraal, Den Haag Centraal, Rotterdam Centraal and Schiphol in 2018.
- Improvement of the station maps. After Arnhem Centraal, Den Haag Centraal and Utrecht Centraal in 2018, all 50 major stations will get these new station maps, which show all facilities and the pedestrian routes to and from the trains.
- Viewing rounds at stations with national public transport users' forum LOCOV.
- Information points for passengers at smaller stations, partly for the visibility of the station as well as improving the provision of information.

Compliance

We want to comply with the applicable laws and legislations. NS Stations has now signed contracts with all train operators in which they all hire station facilities under the same conditions and at the same rates. When the franchises changed hands in Limburg (December 2016) and on the Zwolle-Enschede-Zwolle-Kampen line (December 2017), we helped the new carriers so that they were able to start their new train services on time. Integrity and acting ethically are important. The NS Code of Conduct has an addendum for NS Stations, focusing on property. In order to keep the Code of Conduct top of mind in practice, discussions were held in 2017, both in teams and between managers and employees.

Performance on HSL South



We are working hard on improving the performance on the HSL South. We want our passengers to get reliable services. We pay continuous attention to all aspects of the existing services, such as punctuality and seat availability, and we are introducing robust new services.

Customer satisfaction on the HSL South

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
General customer satisfaction with HSL South services	77%	78%	68%	73%

The general customer satisfaction figure for HSL South comes from satisfaction figures for IC direct and Thalys. 77% of passengers gave travelling by HSL South a score of 7 out of 10 or higher. This is lower than in 2016 (78%). Satisfaction with the availability of seats in IC direct trains in particular scored lower than in 2016. This is because the likelihood of getting a seat at peak times on the HSL South has gone down due to strong passenger growth. However, punctuality on the HSL South improved and the number of cancelled trains decreased. Customer satisfaction with Thalys has improved. Journey information and punctuality stand out positively, and hospitality and use of passengers' own time are also better than the previous year.

IC direct

The introduction of the new The Hague-Eindhoven Intercity led to a dip in performance due to the complexity of the system and product, especially in the first few months. In 2016 we set up an improvement programme with measures for IC direct, aimed at improving the results. If necessary we will add measures to the improvement package. The focal points in 2017 included improvement and expansion of the HSL training and supervision for train drivers, focusing on departure punctuality and technical measures.

Running on time on the HSL South

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Punctuality for passengers on the HSL South*	83.5%	81.7%	82.5%	84.1%

* Changed values as a result of technical changes that have been implemented in the performance indicators

Punctuality for passengers (to 5 minutes) on the HSL South is determined based on the punctuality of the IC direct and the IC from The Hague to Eindhoven. Punctuality for passengers (to 5 minutes) was 83.5% in 2017 (81.7% in 2016). The HSL South is highly vulnerable to disruptions that lead to follow-on cancellations and delays, thereby having a major impact on performance. Starting the introduction of the Intercity from The Hague to Eindhoven and a completely new timetable put heavy pressure on the annual figure because performance was down in the early months. The punctuality of domestic HSL trains improved in 2017 thanks to the implementation of improvement measures, including phone supervision of drivers by other drivers in the event of a train being stranded, directly focusing on departure punctuality of the IC direct and the IC The Hague-Eindhoven, deploying departure assistants at Amsterdam Centraal and Rotterdam Centraal, closer attention to signals being set to the safe position in good time, and tighter monitoring. There is an 'Intercity direct' improvement programme for improving performance in our HSL South services (Eindhoven-The Hague and the Intercity direct) and to make sure that preparations for the introduction of new services on the HSL South (Eurostar and Intercity Brussels) go smoothly. We are continuing that programme in 2018. Despite the continual focus on improving performance on the HSL, the introduction of the IC Brussels in 2018 will inevitably lead to a temporary dip in performance because of the increased congestion and complexity on the HSL South.

Chance of getting a seat on HSL South

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Seat availability at peak times (HSL South)*	96.8%	97.3%	91.2%	94.9%

* Changed values as a result of technical changes that have been implemented in the performance indicators

During peak periods, the likelihood of getting a seat on the HSL South in 2017 was 96.8% (2016: 97.3%). The IC direct is a popular train and passenger growth in 2017 was high, at 16%. Because NS is unable to add further carriages until the new Intercity rolling stock is introduced, the chance of getting a seat on the HSL South is affected by growth in passenger numbers and by cancelled trains. There is an improvement programme under way to reduce cancellations further, but because of the strong passenger growth it is expected that this indicator will fall further in future.

About NS and the HSL South

After the V250 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 the HSL South (Lille and shortly London) and to substantially increase the frequency of Thalys.

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, The Hague, Rotterdam and elsewhere. Thalys went up from 8 to 14 trains a day and the French city of Lille was added as a destination twice daily. The Intercity between The Hague and Eindhoven was introduced in April 2017. This train runs partly on the HSL South and passengers have a journey that is 11 minutes shorter over the whole route.

Trains per day

Intercity direct on the HSL South provides 70 trains a day between Amsterdam and Breda. There are 62 trains between Amsterdam and Rotterdam: one every fifteen minutes between Amsterdam and Rotterdam, of which two an hour continue to/from Breda. In addition, Thalys runs 14 trains a day from Amsterdam to Brussels, 10 of them daily continuing through to Paris and 2 a day going to Lille. Along with the train service between The Hague and Eindhoven, this means that NS runs a total of 233 trains a day on the HSL South.

Trains run per day on the HSL South	2013	2017
Intercity direct		
Amsterdam-Breda		70
Amsterdam-Rotterdam		62
Intercity The Hague-Eindhoven		73
Thalys		
Amsterdam-Paris	8	26
Amsterdam-Lille	2	2

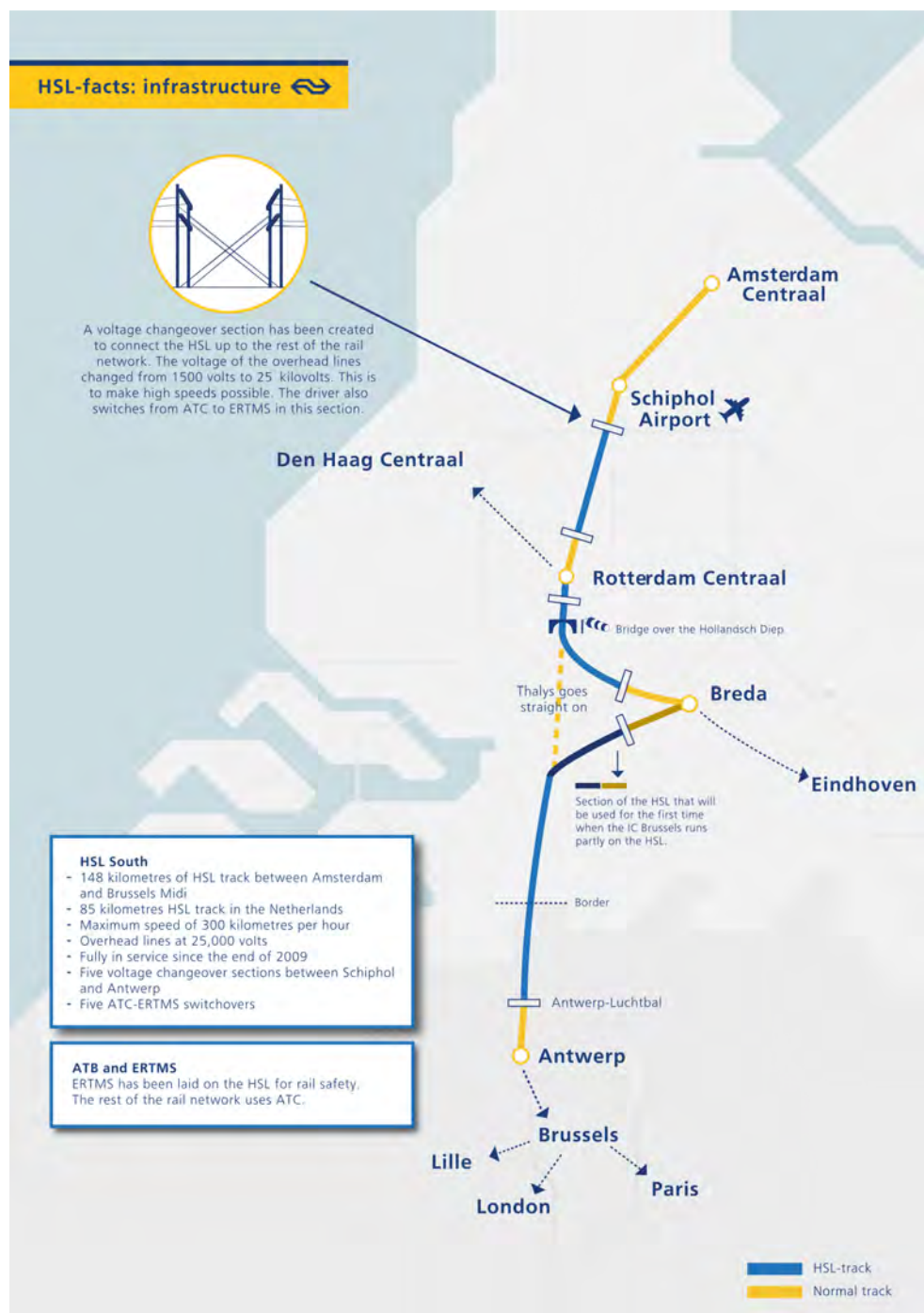
Trains run per day on the HSL South**From April 2018**

Intercity Brussels	16
Eurostar	4

That number will increase over the coming years. Eurostar is starting a direct train link from 4 April 2018 from London to Amsterdam. There will still be a changeover at Brussels Midi when travelling to Britain until passport facilities are arranged at the Dutch departure stations. NMBS and NS are busy with the preparations and test runs of the Intercity Brussels on the high-speed line, aiming to start this train service as of 9 April 2018. This train will run 16 times a day, as it does now: The departure and destination station will be Amsterdam Centraal for 12 of those trains, with 4 trains going to and from Den Haag HS.

Complexity of HSL South

The HSL South is complex. The combination of infrastructure, safety, rolling stock and timetable is unique. Various types of trains run at high frequencies on the HSL. The HSL line consists of both newly laid and conventional track. Trains that run on the HSL, such as the route from The Hague to Eindhoven, Intercity direct and soon Intercity Brussels and Eurostar, therefore have to handle multiple transitions between systems *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.



Perfect execution



On average, NS has performed increasingly well over the past few years. We run on time more often and provide better journey information. Our basic performance for passengers will improve continuously by operating the timetable in accordance with the plans, fast decision-making and responsive journey information during disruptions.

Punctuality for passengers to 15 minutes on the main rail network

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Punctuality for passengers (to 15 minutes) on the main rail network*	97.4%	97.3%	96.7%	97.3%

* Changed values as a result of technical changes that have been implemented in the performance indicators

The punctuality for passengers to 15 minutes on the main rail network in 2017 was 97.4% (2016: 97.3%). As with the 5-minute indicator, a feasible and reliable plan for the timetable is bearing fruit. Because the 'punctuality for passengers' KPI is affected by the reliability of the infrastructure and the rolling stock, NS attempts to keep the reliability and quality of the trains at the optimum level and to improve them. We made software modifications in the new Sprinter trains in the first six months of 2017 that reduced the number of errors with the doors and sliding steps. Thanks to a new approach, the introduction of the new FLIRT trains on the main rail network went satisfactorily. One component of this approach is that NS mechanics visit the factory during the construction of the trains.

Improved journey information

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Information in the train and at the station about disruptions	83.2%	82.0%	75.0%	80.0%

Every year, NS issues more than 500 million journey recommendations about travelling by train, engineering work and disruptions. With proper advice given in good time, passengers can make better choices. In 2017 we gave timely information about disruptions on the train and at the station in 83.2% of cases. That was higher than in 2016 (82.0%). We have improved the systems at stations, so that information screens show the right information in good time more often. In addition, the availability of journey information on the screens in trains has improved due to changes in the software and better management of the suppliers of information.

Journey Planner extended

We are continuously making improvements to the Journey Planner Xtra app and the Journey Planner on ns.nl. We add functionalities that research shows add the most value for customers. In 2017 we based the information from the Journey Planner Xtra more on the passenger's location, their behaviour and the time when they used it. In the past year, we launched a completely revised Journey Planner Xtra app, with more of a focus on the entire journey from door to door. Passengers can customize the app according to their own needs by adding widgets, for example for favourite journeys. The app also gives information about buses, trams and metros (GPS location, times, lines and stops) and the information in the event of disruptions is in line with the information screens at the stations. For ns.nl and the Journey Planner Xtra, there is no need to log in to use the new functionalities.

Journey information screens

Last year we did research into the placement of large screens with up-to-date train journey information, including information on disruptions, at Utrecht Centraal, Amsterdam Centraal, Rotterdam Centraal and Den Haag Centraal stations. Research shows that the presence of screens makes a relatively large contribution to the general customer satisfaction of our passengers. NS has decided to install these journey information screens in 2018.

Journey information in the travel chain

Performance indicator	Realisation in 2017	Realisation in 2016	Minimum value for 2017	Target value for 2019
Journey information during the train journey	86.3%	85.8%	78.0%	83.1%

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. Performance improved in 2017 (86.3%) compared to 2016 (85.8%). This means the performance is at a stable, high level. When the quality of the information from our systems is stable and reliable, we can show the correct information on the screens in good time.

Collaboration with partners in the public transport sector

Work on the tracks often leads to disruptions for passengers. We are working together with our public transport partners to limit inconvenience as much as possible. We consult ProRail about when and how engineering work will take place, and we look at smart ways of organising the work in the long term. We make agreements with other public transport companies about fixed diversion routes when there is planned work. This lets us inform passengers beforehand better and offer an alternative with as little additional journey time as possible. Last year we used the transport capacity of other carriers such as RET, GVB, U-OV and Connexxion for 8 interruptions to services that lasted 52 hours or longer.

Cooperation in the regions

Both Arriva and NS have been operating in Limburg since the introduction of the 2017 timetable. Passengers in Limburg can travel with both carriers using a public transport smartcard and some ticket types are valid for both carriers (depending on the franchise). In the event of interruptions to the service or other disruptions, we work together to offer passengers an alternative. We also make agreements about efficient and useful deployment of security and service personnel.

2018 timetable

The timetable was completely redesigned in 2017. The timetable for 2018, which commenced on 10 December 2017, has built on that basis. This resulted in improvements for the vast majority of passengers, but because space on the railways is limited, there may sometimes be a deterioration for others. The key change in the new timetable is the 'ten-minute train' (six an hour) that runs seven days a week between Amsterdam, Utrecht and Eindhoven. That means shorter waiting times and a higher chance of getting a seat. Numerous changes are being made around 's-Hertogenbosch to make the ten-minute trains and more direct Sprinter connections possible, for instance between Arnhem and Dordrecht and at peak times between Oss and Deurne. The journey time for the Sprinter between Eindhoven and 's-Hertogenbosch will be shorter. In total, the introduction of the new timetable means that we are running about 130 more trains every working day. Other changes:

- Extra trains between Meppel and Leeuwarden
- More Sprinter trains at peak times between Utrecht Centraal and Houten Castellum
- Shorter journeys at peak times between towns in the province of Zeeland and the Randstad conurbation, in the busier direction
- More Intercity trains in the evenings and at weekends from Utrecht Centraal to Eindhoven, Schiphol Airport and Nijmegen

- Four rather than two Intercity trains an hour on Sundays between Alkmaar and Amsterdam Centraal
- Direct trains from Enkhuizen to Utrecht and then on to Eindhoven and Heerlen

We work closely with other rail carriers when drawing up a new timetable. We also inform other passenger carriers such as bus companies in good time about our plans so that they can respond to them.

Better and More: developments on and around the tracks

In a programme called *Beter en Meer* ('Better and More'), NS and ProRail are 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' is the 'Approach to Train Improvement', in which we worked to produce a high-frequency timetable between Eindhoven and Amsterdam.

Controls and adjustments

The programme component called 'Controlling and Adjusting in the Future' aims to restore train traffic as quickly as possible after a disruption. We have improved this by:

- setting up the Central Monitoring and Decision-Making body in March 2017 so that decisions can be made more quickly about alternative plans when there are disruptions
- launching the new Spoorweb communications system for controls and adjustments between ProRail and the carriers
- introducing predefined adjustment measures in the South and Randstad North regions. This completes their introduction nationwide.

Influence of the weather on train services

NS and ProRail work together to make sure passengers can still be sure of reliable transport and good journey information in extreme weather conditions. Despite the relatively mild winter of 2016-2017, we took measures to be able to run according to the timetable in more severe winter weather. Examples include the deployment of trains that scrape ice off of the overhead lines and the application of special gel to combat slippery tracks. In the autumn, mechanics at the maintenance locations worked 24 hours a day to repair 'square wheels' (flat spot damage). Following the storm on 23 February 2017, we have been working since 2017 with a special timetable in the event of storms. In December we ran a modified timetable for two days due to winter weather. On one of those days, the Dutch meteorological office KNMI gave a code 'red' weather warning for the whole of the Netherlands.

New and upgraded rolling stock



Every working day, NS runs more than 5,000 Sprinter and Intercity trains to provide over 1.2 million train journeys. NS is investing in purchasing, refurbishing and upgrading rolling stock, largely in response to growing passenger numbers. Proven technology, sustainability and convenience for passengers have the highest priority. Effective deployment of the new rolling stock will give passengers more seating and greater comfort.

New Sprinters

NS is investing in new Sprinter trains. We have ordered 58 new FLIRT type trains from the supplier Stadler. These are being introduced in phases, starting with the 2017 timetable. This has added around 10,000 seats. From the autumn of 2018 and in 2019, NS will start using 118 Sprinter trains from CAF, with a total seating capacity of 20,000 seats. Both types of trains meet strict technical requirements, are energy-efficient and have wide doors. A retractable step makes getting on and off the train easier. Transparency and more light improve the feeling of safety in the train.

Since the 2017 timetable, NS has been running the regional franchise R-net between Gouda and Alphen. NS has had 6 more trains built for this. The inside and outside of the trains match the red-and-grey house style of R-net.

A new generation of Intercity trains

In 2016, NS signed a contract with the train manufacturer Alstom for the supply of 79 new single-decker Intercity trains. The new trains are scheduled to come into use from the 2021 timetable onwards. These are trains with a total of 25,000 seats that can run on both the regular network and the HSL South. The introduction of the new trains will also ensure that the HSL is used more efficiently than originally planned, and that the frequency and speed on some routes can be increased. A mock-up of the new train was presented in 2017 that attracted a great deal of interest. This full-scale model shows what the train will look like and what passengers can expect in this new Intercity train. The train is fitted with all kinds of conveniences, including electricity sockets, Wi-Fi, air conditioning and wheelchair-accessible toilets. The new trains have the ERTMS (European Rail Traffic Management System, the new European standard) and ATC (automatic train control, improved version) safety systems. The design of the Intercity was the result of close consultations with passengers, conductors and drivers, maintenance staff and cleaners. A Train Test Team assessed the seats, the layout of the train areas, the art and the train setup.

Upgrading Intercity and Sprinter trains

The first 27 upgraded VIRM-1 trains started running in the Netherlands in 2017. NS will be upgrading a total of 80 trains with 415 coaches in the period to 2020. Sustainability is an important factor here. Some elements, such as the cab and vestibule, are to be reused as much as possible. LED lighting that adapts to daylight levels will be added. The trains also have energy-efficient climate control systems and eco-toilets with bioreactors. The train setup is changing too: the upper deck is suitable for reading or working, with seats in twos and business-like decor, and there is more space for luggage. The lower deck is becoming more informal, with seats opposite each other and a lounge seat. Studies show that passengers find the train clean, tranquil and light. At the end of 2017, it was decided to upgrade the VIRM-2 and VIRM-3 type trains as well. The design phase has started and the first train set will be completed by the end of 2020. All SLT train sets will have an environmentally friendly toilet and retractable step by 2021 at the latest.

Availability of trains

NS withdrew an overall average of 11.4% of the fleet for maintenance, repairs and refurbishment on any given day in 2017 (2016: 9.7%). This means that we performed better than the norm of 13.6% per annum and that we met the target that is needed for the timetable. The main reasons for the increase were the influx of new trains such as FLIRT and the reintroduction of reserve trains (DDAR and DDM1). In both cases, this leads to more withdrawals than in the case of familiar rolling stock. There were also more withdrawals for long-term maintenance and refurbishment and we had to deal with more damage incidents.

Organisational improvement



To be able to deliver a perfect service, NS needs to develop into a decisive and result-oriented organisation with effective leadership. We attach great value to operating in accordance with the agreed norms and values.

Integrity and compliance

In response to the irregularities in the public transport tender in Limburg in 2015, the consultancy firm Alvarez & Marsal was commissioned by our shareholder (the Ministry of Finance) 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 aimed at getting GRC to the desired level and promoting the desired behaviour within the NS organisation. In doing this, NS aims to comply systematically and lastingly, demonstrably and credibly with the standards that are appropriate for a company of NS's social standing and responsibilities. Concrete goals and actions are specified in the improvement plan. NS has tackled the actions as a matter of urgency and nearly all the measures have now been taken. The implementation of some measures will take several years because they affect the entire organisation or because they are extensive by their very nature. NS reports regularly to the Supervisory Board and the shareholder on the progress in implementing these measures.

In July 2017, NS sent the shareholder a letter giving substantive information on progress in implementing the action plan. This letter stated that the design of GRC within NS has now been brought up to the desired level, which involved the implementation of radical changes in the organisation's structure. The shareholder informed the Lower House of parliament in writing about this progress in August 2017.

Three lines of defence

In the Executive Board, the Chief Governance, Risk & Compliance Officer is responsible for governance, risk, integrity and compliance. This means that GRC is embedded at the highest level. Within GRC, NS applies the 'three lines of defence' principle, as described in the chapter Managing risks.

Integrity & Compliance department

As part of the new structure for the GRC approach, the Integrity & Compliance department was established in 2016. The department plays an important role in encouraging desired behaviour and it seeks to promote correct observance of legislation and regulations within NS, for instance through accessible training courses. Its activities focus on formulating policy on relevant themes such as conflicts of interests, protection of information, fraud, corruption, bribery and competition, providing information about them, handling integrity reports, providing advice both spontaneously and on request, fulfilling the compliance officer role in the business units and in that capacity promoting awareness of integrity as an issue within NS. As of 1 January 2017, the department is a separate entity reporting to the Chief Governance, Risk & Compliance Officer, working closely with other departments including HR, Communications, Risk, Legal, Internal Affairs and Audit. Consultations also take place (subject to the limits set by confidentiality) with the confidential counsellors within NS and the *Vangrail* network within NS about developments, trends and signs regarding reports and queries about integrity.

Culture and conduct

In 2017, NS started a company-wide programme to encourage a culture of openness, taking responsibility and exemplary conduct throughout the organisation. 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. That is why NS is paying attention to 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. A culture in which employees are intrinsically motivated to behave ethically, be aware of risks and

be compliant. We use of the 'hearts and minds' method to ensure that staff make deliberate choices about integrity and conduct, with proper understanding and enthusiasm and from an intrinsic conviction (with their hearts and minds). The aim is to have lasting safeguards for an ethical corporate culture and continuous attention for conduct and integrity within NS. A toolkit with a variety of working methods helps managers and their teams introduce improvements.

Integrity portal

The Integrity Portal on the intranet helps raise awareness about integrity within NS and lets staff see what policy is applicable. The portal also gives a picture of the tools and learning aids available for staff and managers when applying the NS policy. The information in the Integrity Portal is constantly being amended and added to in response to the latest developments. Every month, NS publishes a themed bulletin with concise information on a specific topic, such as 'Communication and conduct', 'Conflicts of interest' and 'Intimidation'. Employees can also see in the Integrity Portal where to go with any questions, dilemmas or complaints.

NS Code of Conduct

The NS Code of Conduct specifies NS's four values: proactive, hospitable, cohesive and professional. These values are the foundation for our actions and what passengers can expect from us. The Code of Conduct serves as a guide when weighing up options and making carefully considered choices in diverse and sometimes tricky situations. The Code of Conduct has been published and 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.

Integrity Desk and new 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 intranet. Reports are handled by the Integrity & Compliance department. In October 2017, the new NS scheme for reporting integrity issues (including 'whistle-blower' reports) came into effect. This scheme replaces the NS procedure for whistle-blowers. The scheme 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. The scheme was highlighted within the organisation in various ways. We also paid attention to the importance of having an open and safe corporate culture in which employees can discuss dilemmas and questions with one another.

A level playing field

Compliance with national and international legislation and regulations is important. NS occupies a special social and economic position in Dutch society. It is therefore essential for NS to prevent any conflicts of interest, or the appearance of a conflict of interest. In our strategy, we stated that NS can achieve this by cooperating with other carriers as a good partner. In close collaboration with ProRail, we set up a portal in 2016 in which we offer services and facilities in the context of the Railways Act to all carriers in a transparent and non-discriminatory manner. NS has designated single points of contact (SPOCs) for the different business units, where questions from other carriers can be dealt with carefully behind 'Chinese walls'.

Legal aftermath of the public transport tender in Limburg

Investigation by the ACM

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. NS has therefore submitted a notice of objection, asking the ACM to reconsider its decision. Both the Supervisory Board and the Minister of Finance as the shareholder support this notice of objection.

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 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 against the others involved in the case, insofar as they were charged with the same offences. The Public Prosecution Service has appealed against the ruling of 21 December 2017.

Out-of-court settlement with Transdev

NS and five affiliated companies received a writ of summons from Transdev BBA Holding BV (formerly Veolia Transport Netherlands Holding BV) and four affiliated companies on 22 July 2016 in relation to the tender in Limburg. Following mutual consultation, Transdev BBA and NS arrived at an out-of-court settlement.

Care for the privacy of our passengers and staff

The operations of NS involve extensive data processing, innovative technology and collaborative ventures in which personal data is exchanged. It is our responsibility to ensure that the personal data is processed in the appropriate manner. This responsibility is all the greater given the position and role of NS as a large company at the heart of society. In accordance with the Dutch Personal Data Protection Act, the Executive Board of NS bears ultimate responsibility for full compliance with the applicable privacy legislation.

The processing of personal data has to meet increasingly stringent requirements. The General Data Protection Regulation comes into effect on 25 May 2018. A realignment of the NS privacy policy was therefore carried out last year and we started an implementation programme to make sure NS complies with this new legislation. We are doing this by looking at processes, organisation, systems and conduct.

Occupational safety

Where the safety of our staff is concerned, our aim is that everyone should come home from work just as healthy as when they started, both physically and mentally. In order to improve accident monitoring and implementation of the occupational health and safety policy, NS switched in 2017 to reporting the Total Recordable Rate (TRR) for physical accidents instead of the Lost Time Injury Frequency Rate (LTIFR). The TRR was 5.0 (6.4 in 2016). 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.

Strategy

In 2017, NS identified potential safety risks and took measures based on a risk analysis and evaluation (RAE). We conducted campaigns aimed at informing staff and involving them in the policy. Operational staff were for instance trained as safety ambassadors. NS is doing this to promote safe working practices and thus 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. That is why they are intensively involved in the topic of occupational health and safety. They visit sites around the country on what are termed 'safety walks'. The emphasis is on face-to-face conversations with staff about their personal health and safety in their own working environments.

Working conditions

We have further improved working conditions for employees based on the risk analyses and evaluations. This has led to updates to the training courses, modifications to the design of shops and upgrades to personal protection equipment, among other things. Moreover, particular attention was paid in the shops to fire safety systems, personal safety, food safety and occupational safety. All lessees were given a handy safety guide containing the safety rules for working at stations and tips on what to do in unsafe situations.

Number of reports of aggression

Unfortunately incidents do take place, and each and every incident is one too many. NS encourages staff to report all incidents of aggression. We noted that there were fewer reports last year: 642 (690 in 2016). We have seen a decrease (3%) in the number of injuries as result of aggression. There were 188 injuries in 2016 and 183 in 2017. The reports of aggression were largely cases of "pushing and shoving" (212 times). NS staff were spat at 74 times and threatened with a weapon 15 times. Physical violence was involved in 242 reported incidents. Resistance was involved in 97 cases and 2 cases involved indecent assault.

Sickness absence

The sickness absence figure for NS in 2017 was 5.7%. That is higher than in 2016 (5.1%). Sickness absence among chief guards can be considered 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. This investigation was completed in 2018. 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 vitality, whereby staff can decide themselves what is important to help them remain employable.

Safe and sustainable travel



As of 2017, all our electric trains run on wind power. That is one reason why NS is a trendsetter in sustainable mobility. We have reduced our CO₂ emissions to virtually zero and deal responsibly with energy, waste and procurement. We are improving rail safety for example by further extending the improved version of automatic train control (ATC) and raising awareness among staff.

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. 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. We stopped running diesel trains for passenger transport at the end of last year. 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 fixed parking location and the place at which they are used. Overall CO₂ emissions from transport at NS totalled 1.0 grams per passenger-kilometre in 2017 (2016: 9.5 g per passenger-km).

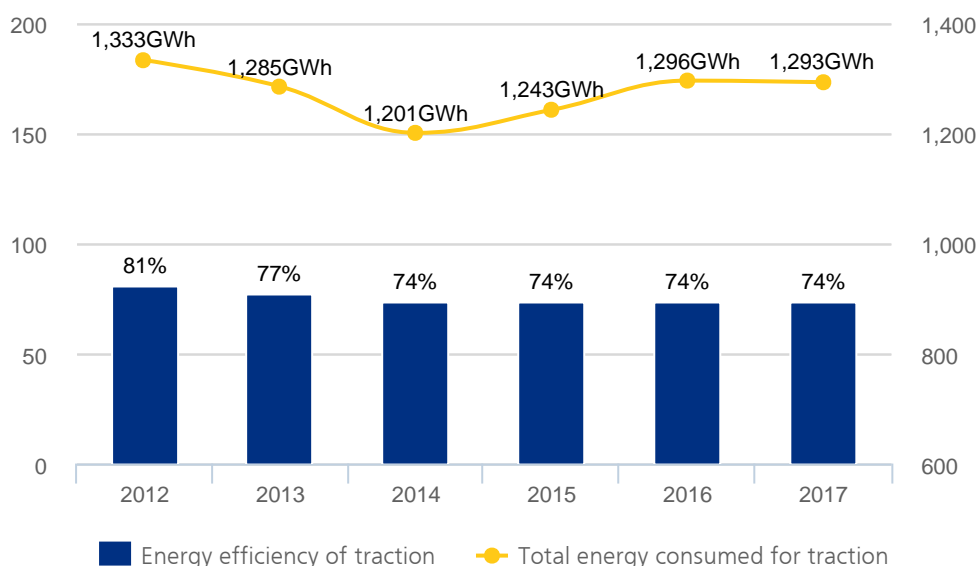
In addition to the trains, in 2017 the electricity used in all NS buildings in the Netherlands became completely 'green' as it was generated by wind power. In 2016, the figure was 73%. The gas used in our buildings will be fully climate-neutral by 2020, as determined by traceability and additionality (added environmental value).

In 2017, the tendering procedure started for climate-neutral replacement bus transport in the Netherlands in which we invited bidders to offer as sustainable a bus service as possible, preferably a climate-neutral one.

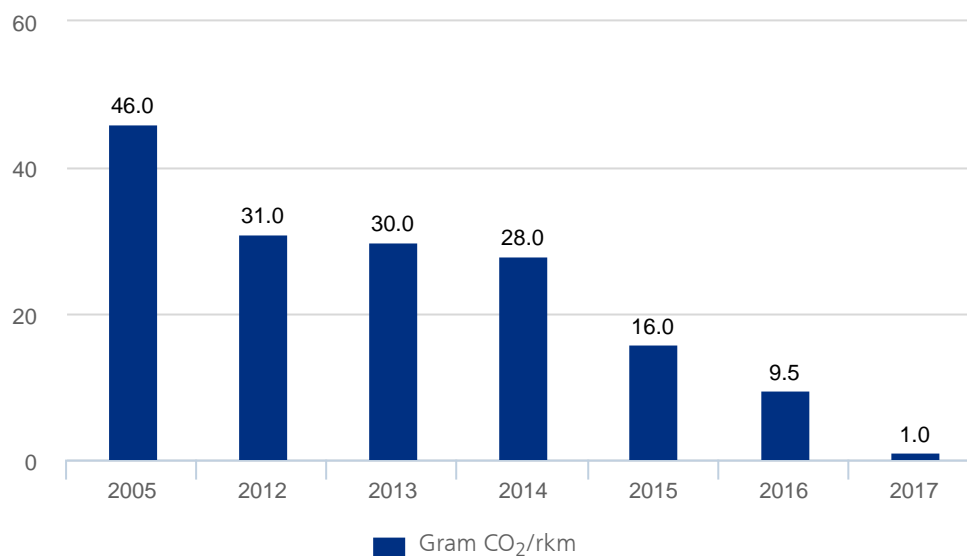
Energy consumption

In 2017, an average of 71.6 Wh of energy was used per passenger-kilometre. This is less than in 2016 (71.9 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, which led to lower occupancy rates in the trains. Furthermore, in 2017 we once again had to temporarily deploy older, less efficient rolling stock. Despite the lower occupancy rates, we were still able to achieve a modest improvement in energy efficiency in 2017 due to the influx of new and upgraded rolling stock and consolidation of energy-saving driving and energy-efficient shunting.

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



Grams of CO₂ emissions per passenger kilometer in the Netherlands by NS trains



Our results	2017	2016
Grams CO ₂ /p-km	1	9.5
Energy consumption by NS trains in the Netherlands (Wh/p-km)	71.6	71.9
Efficiency of trains in the Netherlands	+0.3%-point	-1.0%-point
Green electricity for trains in the Netherlands	100%	73%
Green electricity for buildings in the Netherlands	100%	73%
Green gas for buildings in the Netherlands	25%	0%
Efficiency of NS buildings in the Netherlands (compared to previous year)	2.43%	3.54%

Influencing individual journey patterns

A key factor in addition to effective policies for making mobility more sustainable is influencing individual journey patterns. Letting people experience different modes of travel is an effective way of persuading them to change their choice of transport. NS allows companies' employees to experience the benefits of sustainable mobility through the behavioural change programme "MEE!". The ultimate aim is to achieve increases in the use of public transport and bicycles and in working from home, as well as a reduction in the use of cars, which will all result in considerable savings in costs and reduced CO₂ emissions.

Waste reduction

NS produced around 18 thousand tons of waste in 2017 in its trains and at its workshops, stations and offices. Our aim is to be more efficient in our use of materials and for new raw materials to be extracted from the waste. When disposing of materials, we look first to see whether the product can be reused, then we consider the reuse of product parts and finally the option of recycling the materials. Because we spend over a billion euros on goods and services every year, our measures can help boost the circular economy: NS ensures that manufacturers or suppliers can take the products or materials at the end of their useful life or phase of operation and reuse them in a new cycle, thereby not generating any waste.

2020: 80% of waste recycled as raw materials

By 2020, we want 80% of our waste to be recycled as raw materials for new products. We aim to achieve this for example by:

- separating out waste at the source and after use
- putting circular-economy procurement into practice when purchasing materials
- organising process ownership (waste managers) throughout NS in order to achieve waste targets
- collaborating with key stakeholders such as suppliers and ProRail
- Green Deal for circular-economy procurement
- Green Deal for waste reduction and recycling at stations and in trains.

Waste: our results in 2017

- 41.8% of waste was separated in offices, workshops, stations and trains
- 3.4% less waste compared with 2016

Staff at our workshops were able to separate over 81.2% of the waste in 2017. At stations and in trains, the amount of waste fell (by 4.5% compared with 2016) because fewer newspapers were handed out at stations. More separation of waste meant that we were able to offer 25% of the waste at stations and in trains for recycling in 2017.

Waste at stations and in trains: more separation, less waste

In 2017, we started a trial for taking residual waste to post-separation plants. This resulted in a significant increase in the percentage of waste that is separated. The project in which passengers were asked to leave their newspapers in the luggage rack after reading them was also successful. The total number of copies of a newspaper could be reduced as more people were reading each individual copy. Promotion teams informed passengers about waste separation at eight stations and in the FLIRT trains, where passengers are able to separate out the waste they discard.

Recycling in the maintenance and upgrades of trains

NS is upgrading the VIRM type double-decker trains. In this upgrade process, we reuse 86% of the 'old' train, including the shell, insulation, doors, screens, control panels, destination indicators, stairs and front windscreen. Components that are no longer usable, such as interior elements and upholstery, are used wherever possible as replacement parts for the rail fleet. The remaining components are collected and separated as much as possible for recycling. For instance, the rubber fittings around the windows are collected separately and then recycled as rubber play tiles. Side walls and luggage racks are suitable for tables and cupboards.

With the reuse of materials from the old train (86%) and recycling of the bulk of the remaining 14% of the materials that are removed, a total of over 95% of the materials in the train are given a new lease of life. Our goal is to have an entirely closed cycle. Studies and pilot projects are being carried out to help achieve this.

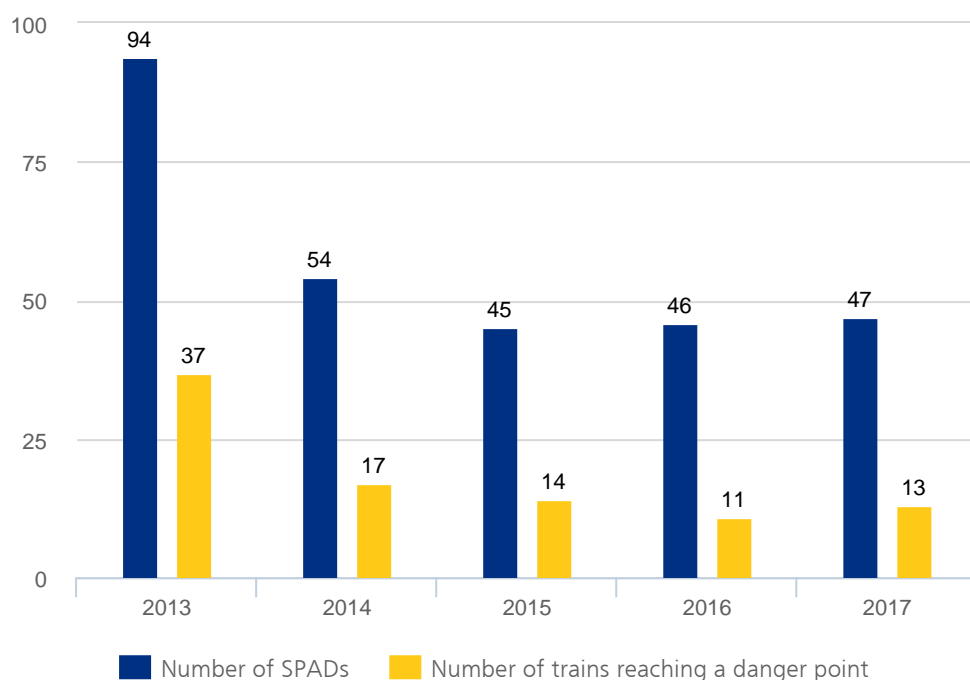
Railway safety

To improve railway safety, NS is developing a single harmonised safety management system for the entire organisation. This creates clear and simple processes, which improves railway safety. This project is expected to take until 2019. The Human Environment and Transport Inspectorate will carry out an assessment in 2018.

Number of signals passed at danger (SPADs)

In addition to the number of accidents, the number of non-technical cases of signals being passed at danger (SPADs) is an indicator of railway safety. The number of SPADs increased to 47 in 2017 (2016: 46). The number of trains that reached a dangerous position (a place where an incident could occur) rose from 11 to 13. Last year, we worked on the further extension of the improved version of ATC and on raising awareness among staff, innovations in the cab and communication with staff about workloads and distractions. We have taken the decision to make the braking criterion (technically enforcing more powerful braking when approaching a red signal) in Intercity trains more stringent. NS has also decided to roll out ORBIT, the system that warns drivers if they are approaching a red signal too quickly. Installation in the rolling stock will start in 2018 and is expected to be finished by mid-2019.

Five-year SPAD trend



Running trains with ERTMS

The European Rail Traffic Management System (ERTMS) is a new European train safety system that is being introduced on the Dutch railways. It increases the safety and reliability of the train service and the ability of different systems to communicate with one another. 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 are taking more time than was originally estimated. Once this has happened, NS can start installing the system in the trains. The improved versions of ATC will remain necessary as some parts of the infrastructure will not have ERTMS for the time being.

Developing innovations



In November 2017, NS opened its innovation studio M-Lab. This is where NS is working on becoming “the leading travel guide for public transport” and developing appropriate innovations for this purpose. Some examples are logging in when on the train to see where the free seats are, or seeing where the chief guard is on the train and asking them a question via the Journey Planner app. M-Lab is the nursery for the NS Journey Planner Xtra where we develop the journey information and communication of the future.

Route information for drivers

As of 2017, drivers can obtain route information from the TimTim (a tablet with information for drivers on routes, infrastructure and rolling stock). The TimTim shows information about the train timetable, temporary speed limits and slippery tracks, for example. The TimTim was voted innovation of the year in an internal poll.

Intelligent Platform Bar

The Intelligent Platform Bar (IPB) is a LED display that lets passengers see where a train will stop and where the doors will be. The display also shows where the entrance is for the quiet coach, first and second class coaches, toilets and wheelchairs and bicycles. The IPB was introduced at Schiphol Airport station in 2017.

NS Innovation Fund

NS is encouraging new entrepreneurs to develop innovative, smart mobility solutions, in part through its investments with the NS Innovation Fund. In 2017 we invested in the Delft start-up Hardt Hyperloop. This is the first company in the Netherlands working on the development of the Hyperloop (transport with pods through a low-pressure tube). Hardt emerged from the winning team at Delft University of Technology that took part in the SpaceX Hyperloop challenge organised by the Tesla entrepreneur Elon Musk. In 2017, Hardt took the first steps in the development of Hyperloop technology. NS also invested last year in a company card provider to encourage corporate use of public transport.

NS is also involved in the Mainport Innovation Fund II (MIF). MIF II invested in three start-ups in 2017 – Parcompare, We4Sea and Synple – that fall within the fund focus of NS and its partners KLM, Schiphol Airport, Delft University of Technology and the Port company of Amsterdam. These three start-ups work on parking at airports, optimisation of fuel consumption by ocean-going vessels and optimisation of logistics.

Operations abroad

Abellio



Abellio is a fully-owned subsidiary of 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.

Key figures (excl. Merseyrail)

	Abellio UK	Abellio Germany
Number of employees	13,048	1,392
Revenue (in €M)	€ 1,742.90	€ 245.70

In 2017, Abellio achieved a turnover similar to 2016, being €2.1 billion², for Abellio UK, Abellio Germany and Qbuzz combined. With the addition of West Midlands in UK and the acquisition of WestfalenBahn in Germany it is expected that the turnover will rise in 2018. However, the value of the British pound continued to decrease in 2017. As in 2016 the turnover figure is influenced by this exchange rate. Based on the 2016 exchange rate for the British pound, Abellio's turnover in 2017 would have been 10% higher, excluding Qbuzz.

NS decided to start the process of selling Qbuzz in July 2016, with the implementation of the new NS strategy of 'Spoorslags Beter'. The sale was completed in August 2017. Busitalia acquired all shares and continues to operate Qbuzz under this name in The Netherlands.

² This figure includes the turnover of Qbuzz in January-August 2017

Abellio's strategy



Abellio's strategy helps NS to achieve its objectives and has three pillars: earn, learn and prepare, whilst effectively balancing risk and reward.

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 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.

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 and franchises, 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 at an acceptable level. The ultimate objective is to create a diversified portfolio of long-term sources of income, and to maintain 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. In the UK, passenger railway contracts are tendered as net contracts, meaning that passenger revenue risk is taken by the operator and any subsidy received is calculated on costs net of revenue. In Germany, most passenger railway contracts are tendered as gross contracts, meaning that passenger revenue risk is retained by the tendering Transport Authority and any subsidy received is based on the gross costs of the contract.

In 2017 Abellio worked within the capital at risk framework which was agreed in 2016 with the Dutch Ministry of Finance and NS. This stipulates how much capital at risk can be invested in the UK and Germany. Foreign franchises and concessions, like Dutch activities, involve (financial) risks. The state as shareholder has agreed with NS rules to limit the risks 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 mother of Abellio, may allocate for its foreign activities of Abellio. This consists of € 500 million for invested capital and regular guarantees. An additional limit of € 500 million applies to the bids in the United Kingdom for specific parent company guarantees that the concession provider requires in the UK. With this framework NS and Abellio can develop foreign activities whilst balancing acceptable risks and results.

Abellio UK



Description of the UK rail market

The UK rail market has operated under a franchised system since privatisation in the 1990s. Under this system, the UK government and devolved authorities award contracts to private operators to run train operating companies (TOCs) for a specified period of time. The majority of the UK's 17 rail franchises are contracted by the Department for Transport and they have a combined turnover of approximately £10.5 billion.

TOCs work in partnership with Network Rail, the state owned infrastructure manager, to run their day-to-day operations, in a private-public partnership. This is especially so in the case of ScotRail, which is run in an Alliance agreement with Network Rail. This means that the management teams are co-located and work together to deliver the best possible service for passengers.

Abellio UK rail and bus franchises

From north to south, Abellio UK operates the ScotRail franchise, the Merseyrail franchise in a 50/50 joint venture with Serco and the Greater Anglia rail franchise in a 60/40 corporation with Mitsui. Since 10 December 2017 Abellio UK also operates West Midlands Railway and London Northwestern Railway in a 70/30 corporation with Mitsui and East Japan Railway Company (JR East). In addition, Abellio UK operates Abellio UK Bus, which provides bus services in the centre, south and west of London, as well as a few routes in the north of Surrey (Abellio London Bus). The bus operations provides complementary travel expertise, especially in the form of rail replacement services to the rail franchises (Abellio Rail Replacement).

Key figures per UK rail franchise and bus company, excl. West Midlands franchise as they joined in December 2017

Operational KPIs 2017	Revenue in euros	Customer Satisfaction	Punctuality	SPADs	CO ₂ emissions	LTIFR*	No. stations	No. train sets/buses
Greater Anglia	736.7M	81%	89.40%	9	33 g per passenger-km	6.3	130	1055
ScotRail	769.1M	85%	90.40%	19	62 g per passenger-km	5.3	357	805
Merseyrail	87M**	89%	95.30%	2	42 g per passenger-km	4.6	59	177
Abellio London Bus	216.7M	N/A	N/A	N/A	1 g per bus-km	4.1	N/A	751

* number of LTIs per million hours worked

** this is 100%. Merseyrail is not consolidated as it is operated in a 50/50 JV

2017 Overview

2017 has been a year of growth for Abellio UK. The most notable achievement saw Abellio UK awarded the West Midlands franchise in a 70/30 corporation with JR East and Mitsui, giving Abellio UK the strongest portfolio of contracts since it began operating in 2002. Abellio UK is now the fourth largest rail operator in the UK and also runs a bus company.

In 2017 Abellio achieved a turnover of €1.7 billion and the next potential contract expiry will not come until 2022, which is the first possible expiry of ScotRail. As at the end of 2017, Abellio UK operates over 2,500 train vehicles and moves over 800,000 passengers every day. In terms of performance (measured in the UK using the Public Performance Measure (PPM)) our UK rail franchises are in the top 14 for UK operators (out of 23). PPM monitors the percentage of trains that have arrived at their final destination within five minutes of their scheduled time – having stopped at all scheduled stations. The following table¹ shows the PPM for 2017 and number of trains running per day per franchise:

	Train operator	PPM	Trains per day
1	c2c	95.9%	400
2	Merseyrail	95.3%	614
3	LOROL	94.6%	1356
4	TfL Rail	94.1%	267
5	Chiltern	92.9%	432
6	East Midland Trains	92.7%	476
7	ScotRail	90.4%	2296
8	Heathrow Express	90.3%	144
9	Arriva Trains Wales	89.5%	982
10	Greater Anglia	89.4%	1308
11	Northern	89.2%	2608
12	CrossCountry	88.8%	297
13	South Eastern	88.7%	2002
14	West Midland Trains	88.3%	1295
15	TPE	87.7%	240
16	Caledonian Sleeper	87.3%	3
17	Great Western	87.0%	1593
18	Virgin West Coast	86.0%	298
19	Grand Central	85.8%	18
20	South West	85.8%	1749
21	GTR	90.8%	3514
22	Virgin East Coast	84.5%	154
23	Hull Trains	79.8%	14

1 This table shows performance of UK's 23 operating companies. 17 of these operations are franchised by either DfT or Transport Scotland. Hull Trains, Heathrow Express, Grand Central are "open access" operators while Merseyrail, LOROL and TfL Rail are public sector operated concessions.

Abellio UK is a major UK employer, with over 13,000 employees across its businesses, including Merseyrail. Two of our UK rail franchises have been affected by industrial action this year. The dispute, which affects also other train operating companies across United Kingdom, is over the implementation of new trains that have either driver operated or controlled doors with the National Union of Rail, Maritime and Transport Workers (RMT) wanting guards to open and close the doors, rather than the driver. Abellio UK is working closely with its employees and all affected stakeholders to reach a sustainable resolution.

Outlook for 2018

Abellio UK continues to pursue opportunities to expand its business mostly in cooperation with bidding partners. Abellio UK is prequalified to bid for the Southeastern franchise and the East Midlands franchise in 2018. End of December 2017 Abellio UK submitted a bid to operate the Wales and Borders franchise, in cooperation with Carillion and Aecom. Following the liquidation of Carillion in January, Abellio has taken the decision to withdraw from the contract

letting process for the Wales and Borders franchise. Outside of bidding, we are looking at ways to maximise the efficiency of existing contracts while we aim to remain in the top of the league in the UK in terms of performance and PPM. Our investment in our businesses will improve customer journeys and the franchises we operate by providing over 200,000 more seats and faster journey times.

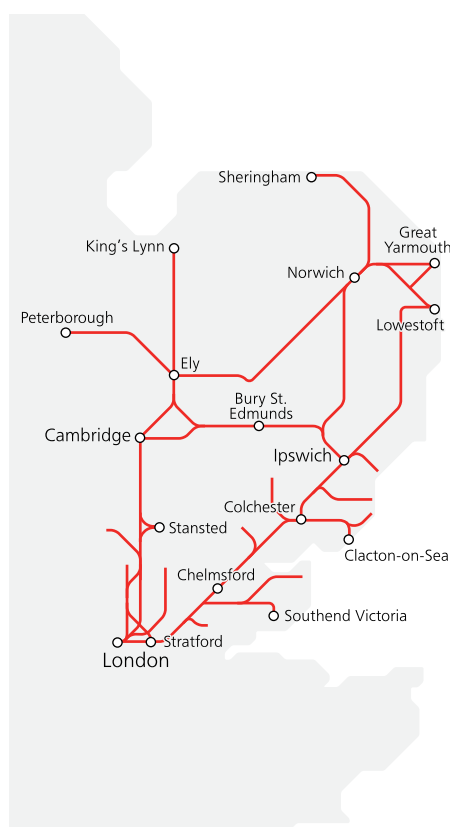
Organisation and staff

Abellio UK's head office is based in Glasgow with a subsidiary office in London. This consists of a number of subject-matter experts as well as a specialist business development team. We believe in a philosophy of empowering our people to run the best businesses they can, led and supported by our top teams. Our mid-term strategy seeks to better lead, prepare, support and communicate with all of our people.

Greater Anglia

Abellio UK will operate the Greater Anglia franchise until 2025, providing train services to almost 200,000 passengers per day in the East Anglia region of the UK on intercity, commuter and rural networks, including services between Stansted Airport and London Liverpool Street. At the start of the year we divested 40% of the shares of Greater Anglia to Mitsui.

The franchise will be underpinned by a complete fleet replacement; the first new trains will be delivered in the third quarter of 2018 and all of the new trains will be in service by the end of 2020. These trains will be leased from the manufacturers; approx. 2/3 of the trains will be built by Bombardier in the UK and the remainder produced in Switzerland by Stadler. The contract sets out over 430 committed obligations which will deliver this transformation and include key infrastructure works (e.g. platform lengthening and depots and stabling works) to support the new train fleet, a new timetable and investments in stations and employees over the nine years of the franchise.



Abellio UK Bus

Abellio UK Bus consists of Abellio London Bus and Abellio Rail Replacement. Abellio London Bus operates bus services under contract to Transport for London (TfL) from six leased bus depots located in South and West London and has a market share of 8.2% at the end of 2017 (2016: 8.4%). In Q2 2017 we significantly reduced the scale of our Surrey bus business (which was the regional part of our bus business), however we are in the process of expanding our London business with the construction of a new depot in West London. We anticipate that this could increase fleet capacity by approximately 135 buses and help drive the organic growth that the business is pursuing. We ended 2017 with 50 bus routes, running a fleet of 751 buses. Abellio London Bus achieved a Road Traffic Accident Rate of 47.2 per million kilometres in 2017 against a 2016 result of 39.4. The increase was as result of the reduction of the Surrey network and introduction of new routes.

In addition to our bus services in London we operate Abellio Rail Replacement, offering rail replacement services to all of our UK rail franchises as well as to some of our competitors. We also operate a small events management service which we plan to grow over our business plan period. This events management service provides bus services to events, such as major sporting events or corporate activities.

Merseyrail

Our longest running operating company in the UK is Merseyrail, the commuter urban network for the Liverpool City Region. Operations began in 2003 as part of a 50/50 joint venture with Serco and will continue until 2028. The concession is now just over halfway through its term, and is currently undergoing a business transformation with three major improvements projects: a new fleet, smart card technology rollout, and taking some of its asset management from Network Rail in-house.

The contract to manufacture the new trains was awarded to Stadler in February 2017 by Merseytravel who is our client for the concession. The new trains will be in operation by 2020. Merseyrail's National Rail Passenger Satisfaction (NRPS) score was 89%, amongst the best performing train operators in the UK, despite which shows satisfaction at the way it handled major engineering works which have caused network disruption.

During 2017 Merseyrail has suffered considerable industrial action over the proposed introduction of trains which will operate under driver controlled operations (DCO) and the business continues to manage this on an ongoing basis. This was in addition to a considerable part of the network being closed for engineering work for the first six months of the year. This proceeded smoothly and passengers were fully briefed throughout.



ScotRail

Abellio UK operates the national railway in Scotland, delivering intercity, regional and suburban rail services across the Scottish national rail network. We have built an alliance between ScotRail and Network Rail. We have a joint workforce helping deliver a world class service for passengers. We will operate the franchise for a period of ten years until 2025, with a seven-year break clause exercisable at year five. In 2016 ScotRail saw some challenges around delivering its performance targets due to a period of industrial action over the proposed introduction of DCO coupled with major engineering works across the network. The industrial dispute was resolved following lengthy negotiations with the unions and our client in the region. In 2017 there has been a marked improvement. Figures show that, for the 12 months to 6 January 2018, 90.4 per cent of ScotRail trains met their PPM performance target. While ScotRail is the best performing large operator in the UK, the performance falls below the improvement plan target of 90.8 per cent for the past twelve months set by the Scottish Government. As a result, the ScotRail Alliance will now undertake a full review of its performance and produce a plan to further improve the service its customers receive. Customer satisfaction with ScotRail has improved in the past year according to the NRPS survey, finding that 85% of ScotRail customers are satisfied with the operator. This is an increase from 83% at the same point last year.

The new fleet programme has seen some delays due to a number of factors, and the first trains will be introduced into service in 2018. The trains will be leased.



West Midlands

We started operating the West Midlands franchise on 10th December 2017. The franchise covers services across Birmingham, as well as trains from London Euston to Crewe and from Liverpool to Birmingham. Day One operations were successfully delivered and the launch event was attended by both the UK Rail Minister and the Birmingham Metro Mayor. This is reflective of the important role that the new franchise will play in delivering economic growth to the region.

Under the new franchise, we will deliver 400 train vehicles by 2021 providing space for an extra 85,000 passengers on rush hour services in Birmingham and London. The longer trains will provide extra seats and space for passengers. Smart ticketing and live passenger information will also be rolled out under the new franchise, as part of a package of reforms that will improve journeys for passengers.



Abellio Germany



Description of the German rail market

The German regional railway market has a volume of around €10 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 has adopted a different tendering regime, with a substantial flow of potential franchises. There is a constant flow of tenders into the market, and this will continue well into 2019. In 2018 the network Elbe-Spree will come to the market and will be the largest ever bid on the German rail market with more than 26 million train-kilometers in 4 lots.

While the number of players competing with state-owned Deutsche Bahn (DB) AG has continued to grow, the majority of tenders in 2016 were awarded to parties other than DB. In 2017 there were fewer tenders, but most of them were won by DB. DB still services around 66% of regional rail transport in Germany.

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 transport authority. On top, inflation risk is hedged by appropriate escalation formulas. Thus, the risk profile of gross contracts is low.

Abellio Germany rail concessions

In Germany, Abellio continues to operate in three regions, together operating 6 concessions. In Nordrhein-Westfalen (NRW) it operates with Abellio Rail Nordrhein-Westfalen 4 rail concessions, being Emscher Ruhrtal-Netz, Ruhr-Sieg-Netz, Der Mungstener and Niederrhein-Netz. In Nordrhein-Westfalen and Niedersachsen it operates with WestfalenBahn, the Emsland- und Mittelland-Netz concession. In Mitteldeutschland it runs with Abellio Rail Mitteldeutschland the Saale-Thüringen-Sudharz Netz (STS). Abellio also continues mobilising the DISA network in Mitteldeutschland, in NRW the Rhein-Ruhr-Express, S-Bahn Rhein-Ruhr and Ruhr-Sieg-Netz 2 and also in southern Germany (Abellio Rail Baden-Württemberg) in order to be ready to operate Stuttgarter Netz rail franchise in 2019. The concessions that are currently being operated are:

	Emscher Ruhrtal- Netz	Ruhr-Sieg- Netz	Der Müngstener (S7)	Niederrhein- Netz	Emsland- und Mittelland- Netz	Saale- Thüringen- Südharz- Netz
	ABRN	ABRN	ABRN	ABRN	<i>WestfalenBahn</i>	ABRM
start	2005	2007	2013	2016	2015	2015
end	2019	2019	2028	2028	2030	2030
passengers per day (approx.)	2,000	22,000	13,000	19,000*	35,000	23,000
punctuality (to 5 min)	98.3%	95.2%	97.0%	92.5%	88.1%	92.6%
train sets	3	17	9	21	28	35

* estimated, no proven figures available

The franchises in the mobilisation phase are:

	Rhein-Ruhr-Express (RRX) – RE1/RE11	S-Bahn Rhein-Ruhr (partial franchise B)	Ruhr-Sieg-Netz 2	Stuttgarter Netz / Neckartal	Dieselnetz Sachsen-Anhalt
start	December 2018 and mid-2020	December 2019	December 2019	June 2019, December 2019 and June 2020	December 2018
end	December 2033	December 2034	December 2034	December 2032	December 2032
passengers per day (expected)	40,000	80,000	17,000	25,000	17,000
train sets	29	29	18	48	54

2017 overview

Abellio Germany is currently the fourth largest train operating company in Germany, with an annual turnover €245.7m in 2017. In recent years, Abellio has built up a strong competitive position in the German railway market and won a number of franchises.

Abellio aims for controlled growth. This means we opt for selective and responsible participation in tenders, professional mobilisation and commercial operation. Abellio became the sole shareholder of WestfalenBahn at the end of 2017. Before this acquisition WestfalenBahn had 4 owners, being Abellio, moBiel GmbH, Mindener Kreisbahnen GmbH and Verkehrsbetriebe Extertal GmbH. Each had 25% of the shares.

In Mitteldeutschland, the STS franchise went in December into its third year of operations.

While the overall performance is satisfactory, the many infrastructure works of DB Netz prevented Abellio Rail Mitteldeutschland from reaching its full performance potential.

The Regional Transport Association of Westfalen-Lippe (NWL) awarded Abellio Rail NRW again the gold medal for quality leadership this year. For the third year in a row, Abellio was the frontrunner in all three categories of punctuality, service performance and vehicle condition. WestfalenBahn came in second.

Outlook for 2018

The market is expected to remain stable. Abellio will continue to bid selectively and responsibly.

In 2018 we will start our operations of Rhein-Ruhr-Express (RRX) and the Dieselnetz Sachsen Anhalt (DISA). We will also focus on the mobilisation of our other franchises, such as Stuttgarter Netz (STN), S-Bahn Rhein-Ruhr (SBRR) and Ruhr-Sieg-Netz (RSN2).

Organisation and staff

We have signed a collective tariff agreement with the union Gewerkschaft Deutscher Lokomotivführer (GDL). The new agreement stipulates a 39 hour work week instead 40 hour work week (starting 1 January 2018) and will later go down to 38 hours.

New trains

Abellio Germany has ordered new rolling stock via an operational lease arrangement: 48 Bombardier Talent 2 trains will be produced for Stuttgarter Netz. The trains for Abellio, owned by the PTA Nahverkehrsgesellschaft Baden-Württemberg (NVBW), are 26 electric multiple units with three carriages and 22 electric multiple units with five carriages. End of October the first train was presented at the Bombardier site in Hennigsdorf to the public with Baden-Württemberg's Minister for Transportation Winfried Hermann.

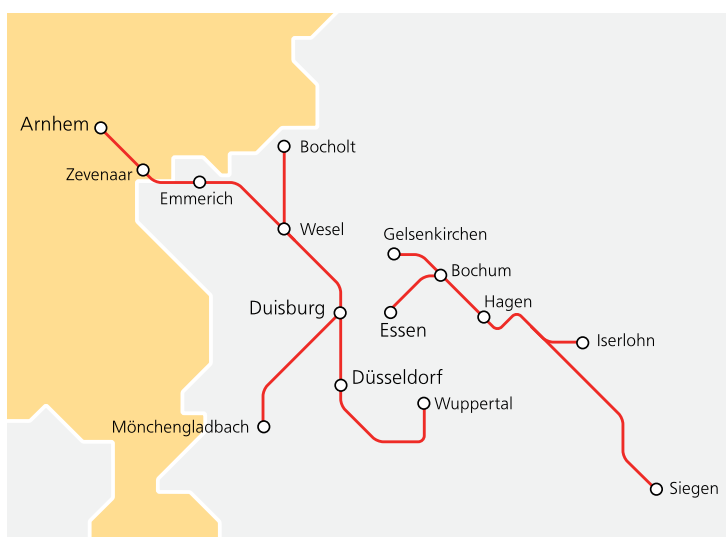
For DISA network Abellio will get 54 Coradia Lint 1 from Alstom financed and owned by NS Financial Services Company Limited (NSFSC). The first new train was presented in November 2017 to the public at Alstom in Salzgitter. As sole shareholder of WestfalenBahn the complete rolling stock is new in the Abellio portfolio. 15 Flirt trains and 13 double-decker KISS trains are rendering services in the Emsland- and Mittelland-Network (EMIL).

Workshop under construction

A three-track servicing hall with a total length of 120 meters 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. It is foreseen that the construction work will be finished in time for operation at the beginning of 2019.

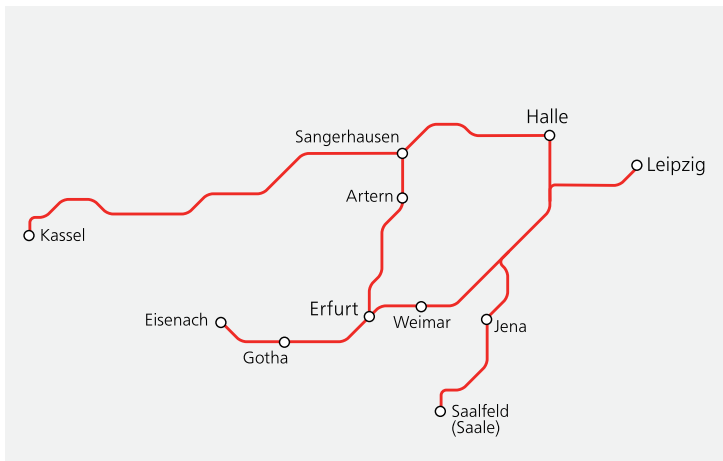
Abellio Rail Nord Rhein Westfalia

In April 2017, Abellio has started the remainder of the Niederrhein-Netz by connecting Emmerich to Arnhem (NL). Twenty-one Flirt 3 trains have been built for this service, including seven three-system trains for cross border to Arnhem. The Flirt 3 trains need to be able to cope with three different power systems (1500V, 15kV and 25kV) and three train safety systems (ATB, ETCS and PZB) for the 17 kilometers that the route covers in the Netherlands. A new workshop was built in Duisburg for this purpose and is used intensively day and night. Abellio Rail NRW is preparing the start of operations for the Rhein-Ruhr-Express (RRX) in December 2018.



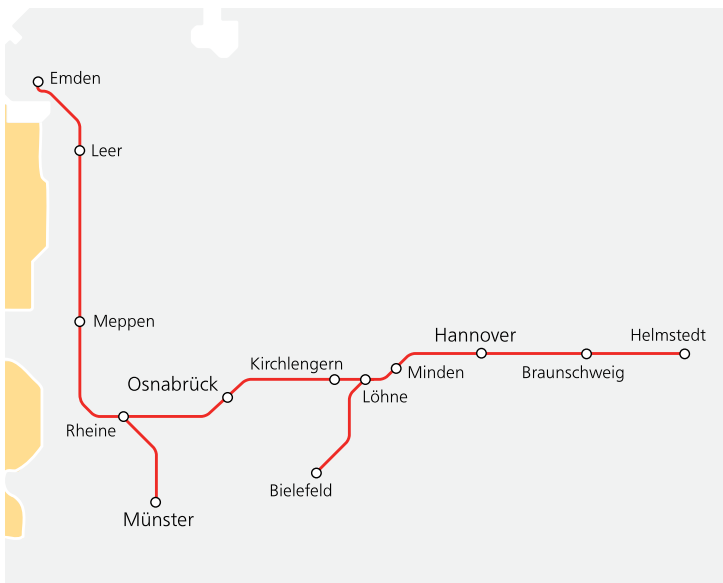
Abellio Rail Mitteldeutschland

Abellio is expanding its presence in central Germany, since Abellio trains will not only run in the Saale- Thüringen-Südharz (STS) electric network, but also in the Sachsen-Anhalt diesel network (DISA) from 2018 and will connect Berlin to Sachsen-Anhalt. Thousands of passengers will then be able to travel with Abellio in Harz and Börde, as well as between the major cities of Erfurt, Magdeburg, Potsdam and Berlin. To date, the STS electric network and the DISA network are the largest networks to have ever been awarded to a regional rail transportation company in Germany.



WestfalenBahn

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. WestfalenBahn, with 267 employees, runs 5.4 million train kilometers per year across the 776 km route network with 54 stations.



Outlook for 2018



NS will continue to focus in 2018 on delivering the best possible performance on the main rail network (including HSL South), further improving the journey from door to door and developing world-class stations. We and our partners will continue to make efforts to keep the Netherlands accessible.

Franchise

NS is on course for the midterm review in 2019. Over the coming year, the focus will be on performing as well as possible for our passengers on the main rail network. In addition, we are looking at the issues that are hot topics in the regions and at how NS can help improve mobility throughout the Netherlands.

Since the introduction of the 2018 timetable, NS has been running trains every ten minutes seven days a week between Amsterdam, Utrecht and Eindhoven. For passengers, that means less waiting and more chance of a seat. There are around 130 more trains running in total on working days.

In 2017, the Intercity Improvement Programme was started in order to maintain high standards of performance in our HSL services (Eindhoven-The Hague and the Intercity direct) and to make sure that preparations for the introduction of new services on the HSL (Eurostar and Intercity Brussels) go smoothly. We are continuing that programme in 2018. Despite the continual focus on improving performance on the HSL, the introduction of the IC Brussels in 2018 will inevitably lead to a temporary dip in performance because of the increased congestion and complexity on the HSL South.

New trains

NS is investing substantially in new trains. Last year, we introduced new Sprinter trains of the FLIRT type in the Netherlands. From September 2018 and continuing into 2019, NS will be introducing Sprinter trains from CAF. This will mean an additional 20,000 additional seats. Both types of trains meet strict technical requirements, are energy-efficient and have wide doors. A retractable step makes getting on and off the train easier, while transparency and more light improve the feeling of safety in the train. NS has also ordered 79 new single-decker Intercity trains. The new trains are scheduled to come into use from the 2021 timetable onwards. These are trains with a total of 25,000 seats that can run on both the regular network and the HSL.

Innovations

At the end of November 2017, NS opened an innovation studio. This is where we are working on becoming “the leading travel guide for public transport” and developing appropriate innovations for this purpose. Some examples are using your smartphone to find out where free seats are on the train, or seeing where the chief guard is on the train and asking them a question via the Journey Planner app. In 2018, we will go further in developing such new services for our passengers. In 2017, we introduced travelling on account, under the name NS Flex, for a small group of existing customers. They then pay for their train journeys afterwards. If this test is successful, a phased introduction will follow in 2018.

Organisation

In 2017, NS started a company-wide programme to encourage a culture of openness, taking responsibility and exemplary conduct throughout the organisation. The aim is to have safeguards for an ethical corporate culture and continuous attention for conduct and integrity within NS. We will be continuing with this in 2018.

NS wants to be seen as an attractive employer where everyone can feel at home. We encourage the recruitment of women, employees from migrant communities and people with occupational disabilities. We aim to have created 200 ‘social responsibility’ jobs for people with occupational disabilities by 2020 in all business units as a whole.

Foreign operations

Abellio UK has prequalified to bid for the Southeastern franchise and the East Midlands franchise in 2018. At the end of December 2017, Abellio UK submitted a bid for operating the Wales and Borders franchise, together with Carillion and Aecom. However, as a result of Carillion filing for bankruptcy in January 2018, Abellio UK has decided to withdraw from this tendering process. In its existing franchises, Abellio UK is investing in additional seating capacity, faster journey times and a better journey experience, among other things. Abellio Germany will start operating the Rhein-Ruhr Express (RRX) and Dieselnetz Sachsen Anhalt (DISA) franchises in 2018. Abellio Germany will also focus on the preparations for the Stuttgarter Netz (STN), S-Bahn Rhein-Ruhr (SBRR) and Ruhr-Sieg-Netz (RSN2) franchises.

Finances

In part because of the main rail network franchise for 2015-2024, NS is currently investing heavily in trains, stations and systems and will continue to do so over the next few years. 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 €4 billion in the period through to 2022.

Long-term developments

Supply and demand

Over the next few decades, the Netherlands will be facing major economic, social and sustainability challenges. Urbanisation will increase, not just in the Randstad conurbation but also in other urban areas such as Eindhoven, Arnhem-Nijmegen and Groningen. The demand for mobility will therefore 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 and 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, as well as full trains. Quieter areas have their own challenges as they face pressure on the collective supply of mobility solutions. Nevertheless, it is important for society to maintain good access precisely to these parts of the Netherlands and to offer the mobility that is so important for everybody. That requires innovative, smart and tailored solutions.

Types of transport

Furthermore, the mobility landscape is likely to change rapidly over the next few years. New forms of transport on the roads and railways (electric vehicles, self-driving cars, demand-driven transport) will need to fit in smoothly with the mobility system as a whole. Added to this are the rapid developments in IT, Big Data and renewable energy. What is more, younger generations in particular have a different attitude to mobility, with a shift from ownership to use. NS remains keen to help meet the challenge of creating good connections that match the demands of passengers, companies and institutions.

Implementation of the Long-Term Rail Agenda

In response to the increasing mobility, NS is working on the agreements in the Long-Term Rail Agenda heading towards 2028, together with its partners including 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 most important 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. NS is doing all it can to further implement the Long-Term Rail Agenda in the next few years. NS and ProRail did a study together into potential further corridors where an increase in the frequency of Intercity trains per hour is desirable. The Schiphol-Utrecht-Nijmegen and Breda-Eindhoven corridors were shown to be the corridors that were most urgent.

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. The parties offering mobility solutions also increasingly recognise the need to tackle the challenges together and in a comprehensive fashion. NS is one of the initiators of the Mobility Alliance, with organisations from the bicycle, car, truck, ferry, bus, tram, metro and rail transport sectors. Moreover, in the Randstad conurbation NS is collaborating closely with the three urban transport organisations in Amsterdam, Rotterdam and The Hague (NS, GVB, RET and HTM in Transport4randstad). The connecting theme in these visions on 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 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 different modes of transport, improving transport to and from the station with the public transport bicycle (OV-fiets) and good bicycle storage facilities and working on further improvements to the journey planner and journey information. In 2018 we will be working on making our plans more concrete.

Development in market regulation of the Dutch railway market

Over the next few years, three developments will affect the setup for the Dutch railway market and consequently the position and role of NS: decisions by the Cabinet about market regulation in the Dutch railway network, 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. NS's position here is that these developments must help meet the mobility challenges described above that the Netherlands will be facing over the next few decades; that is why our priorities are passengers, passengers and passengers.

NS Group

Report by the Supervisory Board



In 2017, the focus for NS was on delivering the best possible performance in all operational processes, so that we could further improve our service to passengers. NS is making good progress, although the results for the high-speed line (HSL) demanded considerable extra attention.

After the turbulent years of 2015 and to some extent 2016, 2017 was a stable year for NS and a return to normality. This was helped by the fact that both the Executive Board and the Supervisory Board were back up to strength with the appointment of Tjalling Smit to the Executive Board in 2017 and Pim van der Feltz to the Supervisory Board. The organisation must and can focus its attention once again on its core task of serving passengers as well as possible.

Strategy

In 2016, the Supervisory Board approved the *Spoorslags Beter* strategy, which identifies three core tasks: improving performance on the main rail network (including the HSL South), creating world-class stations and making a contribution to the door-to-door journey. 2017 was all about implementing this strategy. 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

A central element in the strategy is achieving the aims and fulfilling the agreements with the Ministry of Infrastructure and Water Management as set out in the franchise for the main rail network. NS wants to perform well in the 12 franchise KPIs in the midterm review in 2019.

Stations

A quarter of the overall customer satisfaction score depends on customer satisfaction with stations. NS therefore works permanently on maintaining a high standard of facilities at stations in the interests of passengers. In the past few years, a number of stations, mainly larger ones, have undergone radical renovations. 2017 saw the completion of renovated areas of historical significance at Amsterdam Centraal, the refurbished entrances at Eindhoven station and the new station concourse at Tilburg station.

The door-to-door journey

More than 40% of rail passengers cycle to the station. When stations are renovated, bicycle storage facilities are often upgraded at the same time. The bike is also important for many passengers the final leg of the journey, from the arrival station to the ultimate destination. There was considerable demand once again in 2017 for the OV-fiets, the public transport bicycle.

After choosing to concentrate on three core activities in its strategy (*Spoorslags Beter*), NS has assessed its overall offering of services and products and made some clear-cut choices. One of these was to end its involvement in Qbuzz. The sale of the bus company Qbuzz to Busitalia was completed last year after a scrupulously careful process.

The future

NS is concentrating first on delivering a good performance for the midterm review in 2019. In a meeting with international external experts, the Supervisory Board talked at length about how rail transport is structured in a number of countries and the allocation of roles and responsibilities to the different parties (the government, infrastructure operators and carriers). Of course this included a consideration of how this is done in the Netherlands. The Supervisory Board has also taken note of the coalition agreement and the sections it contains about the government's plans concerning mobility and public transport. The Supervisory Board is closely involved in formulating the strategy of NS for after 2019.

Abellio's strategy

The foreign operations through our subsidiary Abellio focus on two deregulated European markets: Germany and the United Kingdom. Good public transport is not just an export product, it also lets us import knowledge and experience. An important precondition is that the risks associated with Abellio must be controllable. We discuss this regularly with the Executive Board and our shareholder.

Aftermath of the NS irregularities in Limburg

In April 2015, following an internal investigation within NS, it transpired that there had been unacceptable conduct in the tendering process for public transport in Limburg. NS has explicitly distanced itself from these irregularities and immediately took far-reaching measures in its organisation.

The Supervisory Board considered the aftermath on various occasions in 2017. The Public Prosecution Service (specifically, the Office for Financial, Economic and Environmental Offences in 's-Hertogenbosch) started a criminal investigation in 2015 into possible criminal acts in connection with the tendering process for public transport in Limburg. A summons was served on NS Groep NV. On 21 December 2017, the district court of Oost-Brabant acquitted NS of two 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 against the others involved in the case, insofar as they were charged with the same offences. The Public Prosecution Service has appealed against the ruling of 21 December 2017.

In 2017, the Netherlands Authority for Consumers and Markets (ACM) announced its decision following the investigation 'Conduct by NS relating to the franchise for public transport in Limburg'. In the opinion of the ACM, NS violated the Competitive Trading Act. The ACM therefore imposed a fine on NS for this. NS disagrees with the ACM's ruling and the supporting arguments for the decision. By submitting a notice of objection, NS has asked the ACM to reconsider its decision. Both the Supervisory Board and the Minister of Finance as the shareholder support this notice of objection.

Internal organisation

The consultancy firm Alvarez & Marsal was commissioned by the Supervisory Board and the Ministry of Finance to carry out a thorough analysis of the effectiveness of the internal procedures, risk management, compliance and checks at NS and its subsidiaries. Based on Alvarez & Marsal's final report in 2016, NS has taken a wide-ranging package of measures to tighten up internal procedures and checks. The company focused not just on things that go wrong but also on measures that have a preventive effect. An internal culture programme is a major element of this. NS made considerable progress with this last year. Now it is important to ensure the development and maintenance of a decent culture in which staff act ethically and can safely hold one another responsible for their conduct. NS regularly updates the Ministry of Finance on progress in the field of integrity and compliance.

Supervision in 2017

Operational performance

NS has 12 franchise KPIs for the main rail network that it must satisfy. NS has to deliver better performance every year in these KPIs. Each one of them is a challenge, but NS is making good progress.

In addition to the performance on the main rail network, the performance on the HSL South is on the agenda in virtually every Supervisory Board meeting and we regularly discuss this with the Executive Board. The Supervisory Board has studied the problems that are occurring here in detail. To get as good a picture as possible of the complex infrastructure, several Supervisory Board members accompanied a driver on this route to experience the situation in practice.

Safety

Safety is a topic that is regularly on the Supervisory Board's agenda. The board looks not only at personal safety but also at railway safety. By attending internal practices in this area, board members can see how it functions in practice.

Abellio

NS continues to gain experience on the railway market in other countries in part so that it can prepare for possible future developments on the railways. Topics discussed in the meetings included new and ongoing bids for franchises in Germany and the United Kingdom and the performance in franchises that have been granted and are operational, such as ScotRail.

Other

The Supervisory Board regularly discussed NS's tax position and phasing out the system, as discussed with the shareholder, whereby the rolling stock for the main rail network is leased via the NS subsidiary NSFSC, which is based in Ireland. As a result of the accelerated transfer, all rolling stock used on the main rail network had been transferred to NS in the Netherlands by the end of 2017. The Supervisory Board also considered the improvement of risk management in the widest sense and the risk profile that is appropriate for NS in the view of the Executive Board and Supervisory Board.

Collective labour agreement

In 2017, NS and the trade unions negotiated a new collective labour agreement. The Supervisory Board was kept closely involved in the preparations for the negotiations and the negotiations themselves, acting as a sounding board for the Executive Board. The line of approach taken by NS was a balanced, affordable collective labour agreement with attention to measures that can keep staff healthy and at work for longer.

Investments

The Supervisory Board monitors large investments closely. The board debated various investment proposals in 2017, such as the purchase of new rolling stock and modernisation of existing rolling stock in the VIRM 2 and 3 series of double-decker trains.

Corporate governance

The meeting timetable in 2017 was more or less as normal, which is appropriate for the relatively stable business conditions. The cooperation with the Executive Board was both pleasant and constructive.

Functioning of the Supervisory Board

The Supervisory Board reflects regularly on its functioning (both the board as a whole and the individual members) and the fulfilment of the supervisory task by the entire board and its committees. This topic is also addressed in contacts in between the formal meetings and verbal evaluations among members, which fits with the board's aim of making continual improvements. Once every two to three years, the board evaluates its functioning in a structured process with external support. At the end of 2017, an external firm was asked to perform this evaluation again in 2018.

In the past year, the board has paid several working visits both within and outside NS. For example, the board visited the renovated Amsterdam Centraal station and Delft University of Technology to look at mobility innovations, some Supervisory Board members travelled on the HSL and members attended a safety practice. This increases the Board's knowledge of the company and engagement with it, which helps the Board better fulfil its role as supervisor and adviser.

Shareholder

The Supervisory Board had regular, constructive contacts with the shareholder in 2017.

Employee participation

The board had frequent contact with the Central Works Council during the difficult period of 2015 and to some extent 2016. Last year, the number of contacts was reduced by mutual agreement to the normal frequency of two to three meetings a year. 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 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. Following publications by the Netherlands Authority for the Financial Markets (AFM) on the quality of audits of financial statements by accountancy firms, the Risk and Audit Committee put questions to the external auditor and discussed progress in improvement programmes initiated by the external auditor.

Changes to the Executive and Supervisory Boards

Executive Board

NS adapted its management structure in 2016 in line with the new strategy. The Executive Board has been expanded from two members to five. A two-person Executive Board is vulnerable in terms of organised counter-arguments and continuity in staffing and is therefore (according to the board) not a suitable solution for NS, given the complex societal, political and legal arena in which it operates. With the appointment in 2017 of Tjalling Smit as the Director of Commerce & Development and a member of the Executive Board, the Executive Board is now up to full strength with five members.

Supervisory Board

With the appointment as of 1 May of Pim van der Feltz as the sixth Supervisory Board member, the Supervisory Board is also up to full strength with the intended number of members. As is usual for new members, Mr Van der Feltz followed an extensive programme within the organisation with the aim of becoming acquainted with all aspects of the company.

Meetings of the Supervisory Board and its committees

The board met fifteen times in 2017, of which four meetings were by phone. With only occasional exceptions, all members of the Supervisory Board were present at all the meetings. The average attendance of these meetings was 95%. 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 will advise the Executive Board in formulating the strategy for after 2019. The current strategy (*Spoorslags Beter*) applies through 2019.

Risk and Audit Committee

The Risk and Audit Committee consists of Jeroen Kremers (chair and the board's financial expert), Gerard van de Aast and Marike van Lier Lels. The committee met four times. These meetings were also attended as a matter of course by the CEO, the Finance Director and the Chief Governance, Risk & Compliance Officer as well as several staff department directors (Legal, Business Control Group and Internal Audit) and the external auditor. The main topics were the financial statements, the annual report, the six-monthly figures, the budget, the group plan for 2018-2022, 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

The combined Remunerations and Appointments Committee has Paul Rosenmöller as its chair and Janet Stuijt and Gerard van de Aast as members. The committee met three times in 2017. The topics discussed included filling the remaining vacant positions in the largely renewed Executive Board and Supervisory Board, the pipeline for senior management positions, the line of approach for the collective labour agreement negotiations in the autumn of 2017 and the functioning of the Executive Board, both as a team and the 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.

Financial results

NS achieved a net profit of €24 million this year, compared to a profit of €212 million in 2016. The underlying result (disregarding one-off items) fell from €145 million in 2016 to €131 million in 2017. A proposal has been made to pay a dividend of €8 million, which is 35% of the result for 2017. The board has made a critical assessment of the results and discussed them with the external auditor.

NS has an ambitious investment programme of nearly €4 billion euros over the coming years in the Netherlands. 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 the passengers. NS is also investing €3.5 billion abroad, in particular in the leases of rolling stock.

About this report

The financial statements for 2017, 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 of Shareholders to adopt the 2017 financial statements. We also invite our shareholder to ratify the work done by the Executive Board and the Supervisory Board. The profit appropriation proposed by the board can be found in explanatory note 24 to the financial statements.

Thanks to the efforts and the contributions made by all NS staff in the Netherlands and abroad, NS has been able concentrate once again this year on providing passengers with the best possible performance. NS ended the year positively 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 2018 as well.

Utrecht, 28 February 2018
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
- Background: Former chair of the Executive Board of Royal Imtech NV, Former chair of the Executive Board of Koninklijke Volker Wessels NV, member of the Executive Board of Reed Elsevier and member of the Supervisory Board of Océ NV
- 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: supervisory board of the Kröller-Müller Museum, supervisory board of Platform Bèta Techniek, member of the advisory board of 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 bunq



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

- Appointed on 3 February 2016 until 2020
- Background: COO of the Schiphol Group until 2005, then professional board commissioner
- Other positions held: member of the supervisory boards of TKH Group NV, RELX NV and RELX plc, Eneco Holding NV, chair of the Supervisory Board for Nature and the Environment. Various board functions in governmental and social institutions



Paul Rosenmöller (1956), Dutch nationality (m)

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



Janet Stuijt (1969), Dutch nationality (f)

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



Remunerations of the Supervisory Board

The remunerations of the Supervisory Board can be found in explanatory note 2 to the financial statements.

Remunerations of the Executive Board

The key objective of the NR 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. The remuneration policy also 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 Water Management, ProRail and Vitsens) and the Dutch private sector, using weights of 60% and 40% respectively.
- When determining the remunerations of the members of the Executive Board, allowances are made for the effect of remunerations policy on long-term value creation.
- 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 on page 180 showing all the remuneration components.

Base salary

In 2017, the gross annual base salary including the holiday allowance for the members of the Executive Board was as follows:

	Position	Annual base salary (€) on 31/12/2017	Base salary received (€)
Mr R.H.L.M. van Boxtel	CEO	457,662	449,944
Mr H.L.L. Groenewegen	Finance Director	358,950	352,898
Ms M.E.F. Rintel	Director of Operations	358,950	352,898
Ms S.M. Zijderveld	Chief Governance, Risk & Compliance Officer	358,950	352,898
Mr T.B. Smit	Commerce & Development Director	358,950	265,178

The difference between the fixed annual income and the fixed income received comes from the fact that the salaries were increase by 2.3% as of 1 October 2017 as a result of the collective labour agreement. This is in line with the remunerations policy. For Tjalling Smit there is also a difference because his employment at NS only started on 1 April.

The overall income of the employee with the highest base salary, namely the CEO, is nine times the median value of the salaries of all NS staff in the Netherlands³.

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 €68,547 in 2017 (2016: €43,728). The employer's contribution is two thirds of the total pension costs.

	Position	Pension costs (€)
Mr R.H.L.M. van Bortel	CEO	14,431
Mr H.L.L. Groenewegen	Finance Director	14,431
Ms M.E.F. Rintel	Director of Operations	14,431
Ms S.M. Zijderfeld	Chief Governance, Risk & Compliance Officer	14,431
Mr T.B. Smit	Commerce & Development Director	10,823

As required by legislation, pension accrual is capped at a salary of €103,317. 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 €103,317 to all current and new staff. A transitory measure applies to all employees who were 46 or older on 1 January 2015. They will receive a supplementary age-related contribution. The percentage in question will be determined as a once-only action. In 2017, members of the Executive Board received a contribution that was the same as in the above scheme for NS employees.

	Position	Alternative for capping the pension accrual (€)
Mr R.H.L.M. van Bortel	CEO	41,524
Mr H.L.L. Groenewegen	Finance Director	29,878
Ms M.E.F. Rintel	Director of Operations	32,368
Ms S.M. Zijderfeld	Chief Governance, Risk & Compliance Officer	29,878
Mr T.B. Smit	Commerce & Development Director	22,523

Benefits

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

³ All staff at NS and Abellio Transport Holdings BV 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 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. In addition, a chauffeur-driven car can be made available. This director's chauffeur-driven car is in principle only used for business purposes. By this NS also means the business traffic that is not directly associated with the employer-employee relationship, but where private use is unavoidable given the way it combines with the obligations associated with the employment relationship with NS. An additional tax liability is applied for the director's chauffeur-driven car because of this use that is not directly associated with the employer-employee relationship. As the additional tax liability is caused by private use that is unavoidable given the way it combines with the obligations associated with the employment relationship with NS, the Executive Board members receive a remuneration for the tax owed for the additional tax liability. This remuneration is designated as part of the Work-Related Costs Scheme and is therefore paid to the Executive Board as a net remuneration.

	Position	Payment of lease amount (€)	Remuneration for additional tax liability regarding director's chauffeur-driven car
Mr R.H.L.M. van Boxtel*	CEO	-	13,662
Mr H.L.L. Groenewegen	Finance Director	15,720	3,540
Ms M.E.F. Rintel	Director of Operations	2,784	3,540
Ms S.M. Zijderveld	Chief Governance, Risk & Compliance Officer	15,720	3,540
Mr T.B. Smit	Commerce & Development Director	-	2,655

* Mr van Boxtel used the directors' chauffeur-driven car in 2017 and this was compensated by waiving the gross payment of the lease amount.

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

Employment contracts

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

	Position	Date employment started	End of employment contract
Mr R.H.L.M. van Boxtel	CEO	1 August 2015	1 August 2019
Mr H.L.L. Groenewegen	Finance Director	15 September 2016	14 September 2020
Ms M.E.F. Rintel*	Director of Operations	1 November 2014	Unlimited period
Ms S.M. Zijderveld	Chief Governance, Risk & Compliance Officer	1 February 2016	31 January 2020
Mr T.B. Smit	Commerce & Development Director	1 April 2017	31 March 2021

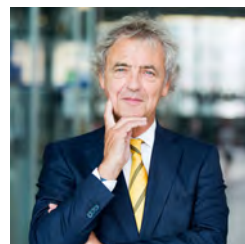
* Ms Rintel already had a permanent employment contract. On 15 July 2016 she was appointed a member of the Executive Board.

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 termination payment cannot exceed one year's base salary.

Personal details – Executive Board

Roger van Boxtel (1954), CEO, Dutch nationality

- Focus on: Corporate strategy, HR, communications, stakeholder management and franchise management
- Other positions held: Statutory auditor of the APG Group, member of the executive board of VNO-NCW, chairman of the supervisory board of Museum De Fundatie, member of the advisory council of the VUmc Alzheimer Centre, chair of the Geschiedschrijving Gorinchem Foundation
- Background: Dutch Law (University of Amsterdam)
- Career includes VNG, AEF, Member of Parliament in Lower House and Upper House, 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: Statutory auditor of Coolblue, statutory auditor of Teslin Participaties, member of the supervisory board of the Dutch Railway Museum
- Background: Business economics (Tilburg University)
- Career includes Exact Software, PCM Uitgevers, Ziggo



Marjan Rintel (1967), Operations Director, Dutch nationality

- Focus on: Operational management, fleet services, international, service & operations, service & maintenance, refurbishment & overhaul
- Other positions held: Member of the board of Hermitage Amsterdam, member of the Supervisory Board of the Dutch National Lottery
- Background: Business Administration (Groningen University)
- Career includes Schiphol, KLM, Air France/KLM



Tjalling Smit (1977), director Commerce & Development, Dutch nationality

- Focus on: development, sales and marketing activities
- Background: Business Administration (Nyenrode)
- Career includes Transavia, Air France/KLM



Susi Zijderveld (1969), Risk Management Director, Dutch and Canadian nationality

- Focus on: NS Stations, legal, risk management, concern-wide safety, internal audits, Integrity & Compliance
- Other positions held: Member of the supervisory board of Filmfonds, member of the board of the National Committee for 4 and 5 May Foundation, 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. It is supervised by the Supervisory Board. These two bodies are independent of each other. Both bodies report on the execution of their tasks to the General Meeting.

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 appoints the auditor. 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 social significance, 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'). In 2017, the rules of procedure for the Executive and Supervisory Boards, the Risk & Audit Committee, the Remuneration Committee and the Appointments Committee were adapted to the Code (which has replaced the Dutch Corporate Governance Code 2008 as of 8 December 2016). 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 apply⁴.

Executive Board

The Executive Board bears the responsibility for managing the business and reports to the Supervisory Board and the general meeting. It establishes the vision for the company and the resulting mission, strategy and objectives. The Executive Board is responsible for implementing the NS strategy. Implementation is partly handled by the business units and subsidiaries, for which the titular directors of the business units and subsidiaries are also responsible. 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, with the aim of providing all stakeholders with a clear understanding of the company's decisions and decision-making procedures.

Executive Board members are appointed by the general meeting on the recommendation of the Supervisory Board. The Supervisory Board decides on the number of members in the Executive Board. Members of the Executive Board can be suspended or dismissed by the general meeting. Members of the Executive Board are appointed each time for a period of four years at most. The Executive Board currently consists of five people and has the following functions: CEO, Finance Director, Risk Management Director, Director of Operations and Director of Commerce & Development.

The Executive Board consisted of the following individuals in 2017: Mr Roger (R.M.L.H.) van Boxtel, CEO, Mr Bert (H.L.L.) Groenewegen, Finance Director, Ms Susi (S.M.) Zijdeveld, Chief Governance, Risk & Compliance Officer, Ms Marjan (M.E.F.) Rintel, Director of Operations, and as of 1 April 2017, 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 policy established by the general meeting. The employment contracts of 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

4 The following best-practice stipulations are not applicable: 1.3.6, 2.1.3, 2.3.8, 2.3.9, 2.7.5, 2.8, 2.8.1 t/m 2.8.3, 3.1.3, 3.3.3, 3.4.2, 4.1.6, 4.1.7, 4.2.2 t/m 4.2.6, 4.3, 4.3.1 t/m 4.3.6, 4.4, 4.4.1 t/m 4.4.8, 5.1, 5.1.1 t/m 5.1.5.

and its affiliated enterprises. It focuses on long-term value-creation and therefore takes relevant interests of the stakeholders into consideration. 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 about a subject 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 relating to 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 board, stating the conflicting interest. Transactions involving conflicts of interests of members of the Executive Board or Supervisory Board will be agreed on conditions that are in line with the market. The Secretary of the Executive Board ensures that the proper procedures are followed and that the actions taken are consistent with the legal and regulatory obligations governing the Executive Board's actions. This policy was complied with in 2017.

Supervisory Board

The Supervisory Board tasks include supervising the Executive Board's policies and the general management of the company and its affiliated enterprises, and it also provides advice to the Executive Board. In performing its duties, the Supervisory Board shall focus on long-term value creation for the company and the businesses connected with it, 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'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 number of 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 outlining the desired expertise and backgrounds of its members. The Supervisory Board aims for a composition that is well mixed, including a mix in terms of gender and age. The profile is evaluated every three years to ensure it is up to date and accurate. More than half 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 will be justified by the Supervisory Board in its report. 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 retirement schedule of the Supervisory Board is published on the company's website.

A Supervisory Board member shall immediately report any potential conflicts of interest relating to NS to the chair of the Supervisory Board. If this concerns the chair, they must immediately report it to the vice-chair. The member in question will 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 subject 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 provide advice to the Supervisory Board and prepare its decision-making. The committees therefore facilitate 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 performs its duties in accordance with the rules of procedure as established by the Supervisory Board in accordance with the provisions of the Code. More than half the Risk and Audit Committee members 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 about monitoring the integrity and quality of the financial reporting of NS and the effectiveness (and assessment thereof) of the internal risk management systems and control systems of NS. 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 Risk and Audit Committee consists of three members. The Risk and Audit Committee currently consists of Mr J.J.M. Kremers (chair), Ms M.E. van Lier Lels and Mr G.J.A. van de Aast.

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 combined Remunerations and Appointments Committee consists of three members; more than half of them are independent in the sense of the Code. The members of the combined Remunerations and Appointments Committee currently are Mr P. Rosenmöller (chair), Ms J.L. Stuijt and Mr G.J.A. van de Aast.

The combined Remunerations and Appointments Committee prepares the decision-making of the Supervisory Board, including 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 and its implementation for the Executive Board.

The combined Remunerations and Appointments Committee draws up an annual report about the remuneration policy for members of the Executive Board and the implementation thereof. The Supervisory Board determines the remuneration of individual Supervisory Board members based on the proposals from the combined Remunerations and Appointments Committee, within the limits of the remuneration policy adopted by the general meeting. The remuneration report can be found in this report.

The combined 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, and 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 the investigations carried out and presents the results of the investigations and audit with an audit opinion concerning the fair presentation of information in the financial statements of NS.

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 external auditor. The external auditor attends the meetings of the Supervisory Board at which its report on the audit of the financial statements is discussed. The auditor is also available for the general meeting at 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 abuses or irregularities are observed or suspected when the work is carried out. If (the suspicion of) an 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 internal auditors perform their duties under the responsibility of the Risk Management Director. The results of their activities are discussed with the Risk and Audit Committee. The Executive Board ensures that the Risk and Audit Committee is involved in drawing up the working plan and that it is agreed with the external auditor. NS Audit is in direct contact with the Risk and Audit Committee and the external auditor.

Organising sustainability

Sustainability of the business practices 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 a Sustainable Business Practices staff department. The Council is a body that prepares decisions and policies. The Council consists of directors of business units and staff departments and is chaired by the Commerce & Development director. Proposed resolutions and policies to be implemented by the business units and/or corporate staff groups are submitted to the Executive Board for approval. There are also communications and other representatives of the NS business units and staff units in the working group and the communications working group for Sustainable Business Practices.

Sustainable mobility is one aspect of the strategy of NS. This strategy is translated into plans and KPIs by the business units. The plans relate to the three strategic themes of Climate-neutral, the Circular Economy and Inclusiveness.

The progress and development of the sustainability results have been observed and managed through the regular planning, control and reporting cycle. Investment proposals should include sustainability impact reports.

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 2017 in the CSR policy and objectives.

Managing risks



Risk management is the deliberate handling of uncertainties that could have a negative effect on achieving the strategic objectives. The following topics are dealt with in order to provide a picture of risk management at NS in this chapter: the risk appetite, the current risk profile, 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 eight 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. Each risk appetite theme is evaluated annually by the Executive Board and adjusted if necessary. NS's risk appetite remained unchanged in 2017:

Category	Risk appetite	Clarification, NS accepts
Reputation	Averse	Zero or minimal deviations from reputation objectives
Finances	Neutral	Limited deviations from financial objectives
Integrity and compliance	Averse	Zero or minimal deviations from integrity and compliance objectives
Growth	Tolerant	Wider deviations from growth objectives
Operations	Averse	Zero or minimal deviations from operational objectives
Safety	Averse	Zero or minimal deviations from safety objectives
Staff	Neutral	Limited deviations from HR objectives
CSR	Tolerant	Wider deviations from sustainability objectives

In 2017, we used stress testing to compare NS's risk profile against the risk appetite. Extreme but plausible scenarios were chosen for the stress tests. For the scenarios, the impact of risks on the objectives of NS is determined based on various financial and operational models in order to reveal any potential vulnerabilities. They make clear when action is required to give a large degree of certainty that the business objectives will be achieved.

Risk profile

NS has agreed ambitious targets with the Ministry of Infrastructure and Water Management for the KPIs for the domestic rail network. Some elements of these objectives have a high risk profile. In addition, when carrying out services, NS is exposed every day to many internal and external factors that potentially affect the operational performance, reputation and financial position of NS.

In addition to the known and existing risks, NS is also actively trying to identify new emerging risks that may threaten the achievement of the business objectives. Insights into this have improved in 2017, when NS actively entered into a dialogue with management teams, the Executive Board, supervisory authorities and external parties involved about developments in the environment and their effect on NS. Ten emerging risks have been identified by the Executive Board, such as extreme disruption caused by specific vulnerabilities, demography and urbanisation, that are part of the risk management process.

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. Additionally, there are various other measures that we use to manage risks, such as the planning and control cycle, the risk framework, the business control framework and investigations of various incidents. They will be dealt with in various parts of this report.

Governance

The organisation of NS's risk governance is based on 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 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.

In 2017 we improved the cooperation between the Risk, Integrity & Compliance, Legal and Audit departments. This enhances the overall risk management because it ensures greater cohesion in the planned activities from the perspective of the business side.

Furthermore, a number of points for improvement regarding risk management and control systems were identified within NS in 2017: they involve the governance, reporting and monitoring. Cooperation within the risk management work field was improved in 2017 and the Risk and Audit Committee appointed. In addition, the risk policy was formalised and various parts of the Risk Framework have been translated into practical tools, as a result of which risks can be identified more easily and in a uniform way, both in the regular processes and within projects. Although internal risk management systems and control systems were already being used, the basic assumptions are not always the same. The basic assumptions were determined in 2017, and further steps will be taken in 2018 to ensure all main processes have a control framework that meets these basic assumptions.

Risk management system

NS has implemented a system for identifying and controlling 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 specialised risk departments and the operational business, and to make risk assessments systematically (weighing risks up against the risk appetite). It consists of four cornerstones:

- Regular consideration of risks by the management in the form of risk assessments
- Active monitoring of proper risk management within projects and programmes
- Weighing up risks in decision-making
- Analysing incidents to learn from 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 based on a risk assessment beforehand and the position within the company.

Recording and reporting

Identified risks and the risk owners are recorded in risk registers. Important steps were taken in 2017 to quantify risks where possible; this will be rolled out further in 2018. 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. A recently selected Enterprise Risk Management system supports the recording and reporting of risks. In 2018, this will ensure a more uniform procedure for risk management. Risks that exceed the tolerance thresholds are reported immediately and escalated if necessary. The Executive Board reports on and renders an account of the risk management system and internal control to the Supervisory Board after discussing this in the Risk and Audit Committee.

Culture

Risk management must become part of our DNA, but without hindering the business operations. Staff are becoming ever more aware of risk, in part because of the activities and training organised by the Risk department. The Risk department is an integral but independent NS unit. It informs, challenges, takes stands and provides advice (both on request and unsolicited) based on its knowledge of our company, 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 risk management and internal control systems relating to the financial reporting risks in the financial year functioned satisfactorily and give a reasonable degree of assurance that the financial reports do not contain any material misstatements. The report thus gives a sufficiently clear picture of how the above-mentioned systems work. 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;
- it is justifiable given the current state of affairs that the financial reporting has been drawn up on a 'going concern' basis; and
- the materially relevant risks and uncertainties stated in the annual report are appropriate for the expected continuity of the company for a period of twelve months after the report was drawn up.

Company 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 will be discussed in detail below, as will changes in the risk profile with respect to 2016. For the financial risks, please refer to the 'Financial risk management' chapter in the financial statements.

Key changes in the risk profile compared with 2016

Two new risks have been added: the implementation of ERTMS, and legislation and regulations. The risk that the introduction of ERTMS will lead to a reduction in operational performance, or even unacceptable inconvenience to customers, has potentially major consequences for the performance of NS. Plus the risk that forthcoming major legislative changes, such as the General Data Protection Regulation, increase caused the risk that NS will not have changed all processes to meet legislation and regulations on time. The risk change programmes as reported in 2016 have become improvement capacity with respect to risk, because it is the capacity to change and the effect of change programmes on NS's efficacy that are the determining factors rather than the number of programmes. In recent years, a number of programmes have been completed that were aimed at the smooth introduction of large amounts of new rolling stock. FLIRT trains were introduced without major problems, demonstrating sufficiently clearly that NS is able to manage this risk. Permanent attention is being paid to the availability of rolling stock to make sure that this risk will be controlled in the long run too.

Looking ahead to the company's risks in de the future

In the list given below, the key company risks have been classified into the eight risk themes used within NS and their relationships are shown to the COSO risk areas. The table gives the key measures for each risk, shows the trend in how it is being controlled and compares the desired risk profile (blue bullet) against the current risk profile (grey bullet).

Risk theme	Risk	Measures	Trend	Risk appetite		
				averse	neutral	tolerant
Operations	Scope for improvement: Providing improvements too late or with insufficient results	Signal and avoid bottlenecks by controlling the portfolio of projects. Discuss the long-term strategy with the participatory bodies and the unions. Long-term employability of staff included in the new collective labour agreement.	+			
	HSL offering: not performing as agreed	NS and ProRail will make every effort possible to make sure that improvements are introduced in a controlled way, using a testing and validation programme and a phased introduction process.	+			
	Infrastructure: lack of infrastructure capacity and quality improvement backlog	Close cooperation (in programmes too) with ProRail and the Ministry of Infrastructure and Water Management so that the Long-term Rail Agenda can be realised.	+			
	ERTMS introduction: disruption to the implementation process causes problems for customers	Proper preparation on the part of NS. Small-scale test to gain insights and then step-by-step introduction. Careful alignment with other stakeholders (including ProRail) about follow-on step and measures.	=			
	IT reliability: not meeting the operational and security requirements for IT systems or of legislation and regulations	Making deliberate choices when investing. Replace critical applications. Set up various cooperative arrangements to meet the staffing requirements.	=			
Safety	Safety: NS not fulfilling its duty in case of a major safety incident with passengers and/or staff	QHSE setup has been started. Closing access gates improves personal safety. Close cooperation with other parties about the threat of terrorism.	=			
Finances	Inadequate operating result: insufficient operating results and not enough cash flow generated	Focus both on cost savings and on increased productivity and revenues. The same focus within the finance column as in the business. Stress testing as the basis for a strategy for the future.	-			
	Market regulation: loss of commercial activities and contribution to results	Performance improvements by carrying out various programmes that increase the chance of awards by private tender. An internal NS team has been set up to follow this issue.	=			
	NS investments abroad: Insufficient operating results from foreign investments, e.g. because of the effects of Brexit	Agreements made with shareholders. Entering into strategic partnerships. Plenty of discussions with the infrastructure manager. Explore possibilities for growth.	+			
Compliance	Non compliance: Not meeting legislation and regulations or exceeding applicable standards and values	Staff the integrity and compliance department. Set up a reporting desk. Encourage consciously honest conduct. Follow changes to legislation and regulations and the General Data Protection Regulation in particular.	+			

Management has improved
 Management unchanged
 Management has worsened
 Desired risk profile
 Current risk profile

Scope for improvement

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. As a result of dependencies between improvement initiatives, making the right choices every time remains a challenge. Additionally, the underlying processes of NS are very complex. Finally, a number of improvements also require behavioural changes from the staff. All of this means it will not always be easy to achieve the required changes on time and in full.

Measures

The effectiveness of NS is increasing. By managing the project portfolio, we are able to detect and address bottlenecks on 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. The agility of NS is an explicit theme in these meetings. The collective labour agreement results show initiatives that focus on the lasting employability of staff in order to reduce staff absenteeism.

Risk control trend

The scope of the portfolio management has been extended further in the past year, which has improved control. However, there are still a large number of improvement programmes and projects, which accordingly require considerable efforts from staff; this number should however fall over the next few years. Given the growing pressure on financial returns for the organisation, it is essential that the planned improvements are made and that the numbers of programmes and projects are reduced.

Residual risk

High. The current risk profile does not yet match the desired risk profile.

HSL service

Description

The risk that the improvements made in 2017 will not be sufficient to deliver the agreed performance for the HSL. The agreement with the Ministry of Infrastructure and Water Management about the performance on the HSL comprises operational performance as well as the introduction of new products. If performance is not in accordance with the agreement, the HSL will be put out to tender again and/or this will be 'threatened', which will damage the reputation of NS.

Explanation

The agreements made between the Ministry of Infrastructure and Water Management and NS about performance on the HSL are highly ambitious, taking into account the complexity and limitations of the infrastructure. We see that performance on the HSL improved at the end of 2017 (despite the fact that stranded trains and cancellations still occur). Despite the improvements made, performance (KPIs) on the HSL remains variable and systematically below the performance on the main rail network. The switch of the IC Brussels service to the HSL has been postponed to 2018. The Ministry of Infrastructure and Water Management has announced an additional investment package of €60 million for medium-term measures. The possible measures are currently being worked out by NS and ProRail, and discussed with the Ministry of Infrastructure and Water Management. As well as technical problems in the rolling stock, the complex relationships with other transport sector partners and external circumstances have a considerable effect on operational performance on the HSL. The introduction of the IC Brussels combined with the current instability of performance on the HSL will put considerable pressure on the ability to achieve the KPI of 5-minute punctuality for passengers on the HSL in 2018.

Measures

Both NS and ProRail are doing all they can to ensure that the introductions planned for 2018 will take place in a controlled way, in part by running through a test and validation programme and a controlled and phased introduction process. In addition, the improvement teams are remaining active to make sure that performance will be as good and stable as possible and to take any additional measures that may be required.

Risk control trend

The introduction of the Eurostar and the IC Brussels on the HSL are planned for 2018. The timely availability and admission of suitable rolling stock pose a risk to both train services, as does the execution of sufficiently intensive practices and testing. Agreements with third parties must also be formulated to make sure that the IC Brussels and Eurostar direct train services to London are actually started. This assumes a systematic introduction in the spring of 2018. The introduction of the IC Brussels also adds complexity to the timetable. Problems during the introduction of the new product stages could impact other existing HSL services such as the IC direct and Thalys.

Residual risk

High. The current risk profile does not yet match the desired risk profile.

Infrastructure capacity

Description

The risk that numerous major planned interruptions to the service, faltering investments and political pressure on ProRail lead to a shortage of rail infrastructure capacity and insufficient improvement in the quality, so that NS cannot achieve its growth goals and operational improvements to the extent it wishes.

Explanation

When implementing its scheduled services, NS is dependent on sufficiently reliable rail infrastructure. A number of factors can put additional pressure on the infrastructure capacity and infrastructure quality, both now and in the future. The number of passenger-kilometres will increase further. Safety requirements and environmental requirements are increasing, including for shunting yards. There were a lot of planned interruptions in 2017 due to engineering work; this will be the case in the next few years too. The train frequency on a number of routes will increase in 2018. Finally, NS has ambitious growth plans.

Measures

In 2017, ProRail and NS followed an intensive preparation programme to increase the frequency of train services on a number of routes. This higher frequency makes greater demands on the organisation making adjustments in the event of disruptions. NS and ProRail have therefore drawn up a number of scenarios beforehand and defined adjustment tools to make sure that train services will continue to run as well as possible during disruptions. Gaming and supply chain simulations are used for this. The operational departments at NS and ProRail also performed tests and trained extensively.

An integral asset plan will be drawn up, in which the scheduled service design is combined with equipment, staff and infrastructure for the short and long term. This ensures more integral control towards ProRail regarding the need for infrastructure in the long term. Based on NS's fleet planning, various future scenarios will be developed and assessed, after which they will be shared proactively with the Ministry of Infrastructure and Water Management and ProRail.

Risk control trend

Although control has improved in 2017, it may worsen. Possible reasons for this are the faltering pace of investments, increased safety requirements and environmental requirements, changes in the cooperation with ProRail as a result of the changed control mechanism, and planned interruptions due to the large amount of engineering work on the track.

Residual risk

High. The current risk profile does not yet match the desired risk profile.

ERTMS

Description

The top-priority risks of introducing ERTMS are that the introduction will lead to poorer operational performance or even unacceptable inconvenience to customers and preventing NS trains from running according to the timetable. Replacing the train safety system on the Dutch railways is a major programme, which will affect the performance of NS. That may mean 'normal' inconvenience to customers, but unacceptably severe inconvenience for passengers is also a possibility.

Explanation

The ERTMS programme is very complex, as it comprises technical, operational and organisational elements. The implementation of ERTMS in collaboration with the sector (ProRail, the Ministry of Infrastructure and Water Management, etc.) is still under development. The implementation of ERTMS on the Dutch railways affects both carriers and the infrastructure operator, and concerns both technical modernisations and operational and organisational changes. Both the infrastructure and the trains have to be modified to make sure that ERTMS can be implemented. The current ATC train safety system will remain in use during the rollout until all track sections have been equipped for ERTMS. In the next few years, ERTMS will continue to develop as a European train safety system. The comprehensive character of the changes in combination with the question whether sufficient workable fallbacks can be set up, increases the risk.

Measures

NS is making careful preparations for the introduction of ERTMS. To mitigate the risk of a dip in the regular performance, this will be communicated to stakeholders at the time when it is likely to happen, which will be when the first track section is brought into use in around 2025. The migration steps and the testing strategy for the transition to ERTMS are being chosen carefully and a fallback plan is being drawn up. This will all be agreed with the government (the franchise authority and client for the programme), ProRail and other carriers.

Risk control trend

The Dutch Parliament's expectations of ERTMS are high. The risks of the introduction of this entirely new system are being mapped further and analysed.

Residual risk

High. The current risk profile does not yet match the desired risk profile.

IT reliability

Description

The risk that progress in the outside world and delays in the execution of the migration strategy may lead to a shortage in the required level of knowledge and capacity, as a result of which not all IT systems meet the operational requirements or IT security requirements. The consequence of this is that NS fails to meet its strategic ambitions and cannot guarantee the continuity of its service.

Explanation

Reliable IT systems are needed for running our timetable and delivering sufficient service to our customers. IT is an increasingly important and critical factor in the management of NS's operations, in particular in the provision of information for our passengers, and the control and adjustment of the timetable. There are three cornerstones that are key in facilitating: a stable, efficient and scalable IT infrastructure, sufficient and qualified staff, and sufficiently controllable systems in use. There are currently risks for each of them. Legacy systems are a matter of concern for a stable, efficient and scalable IT infrastructure. In an improving labour market, recruiting and retaining the right staff is increasingly a risk. The controllability is negatively affected by strong dependence on external suppliers, but also by developments in the IT sector which increasingly require inherently less controllable organisational forms such as cloud-based applications.

Measures

Outdated business applications will be replaced, if necessary. We have set up separate programmes for highly critical systems for this. We make conscious choices within the IT portfolio in this to make sure they fit in with the scarce resources. For the recruitment of staff, NS works intensively with training institutions and suppliers of temporary staff. Centralisation is used with the aim of creating a controllable IT environment.

Risk control trend

IT support when complying with increasing legislation and regulations (e.g. privacy) and increasing the defences against cybercrime risks continue to require attention when building new systems and modifying existing ones. Besides the recruitment of 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.

Residual risk

Medium. The current risk profile does not yet fully match the desired risk profile.

Safety

Description

The risk that NS fails to take sufficient measures to prevent safety incidents, or to fulfil its duty of care sufficiently, if a serious safety incident occurs with passengers, employees and/or the environment due to non-compliance with safety procedures and infringements of processes by malicious individuals. 'Safety' covers 10 safety areas: safety on the railways, personal safety, occupational safety, fire safety, transfer safety, information safety, rolling stock safety, environmental safety, food safety and security (including terrorist threats and cybercrime).

Explanation

Proper and safe operations are always a focal point, given their importance for our operations. NS seeks to transport its passengers and staff in a safe manner and ensure their safety at stations. As of 2015 we have started a programme for further improvement of the safety culture, with learning from mistakes included as an essential part. A survey among managers and staff was part of it; this will be repeated at the beginning of 2018 to give a picture of progress.

Measures

Rail travel is one of the safest forms of mobility. NS wants to continue improving safety, and will make efforts in two key areas: control of safety risks and continuous improvement of safety performance. We will improve the management of this broadly defined field of work by tightening the governance for NS-wide safety and by creating a clearer organisation for the Quality, Health, Safety & Environment (QHSE) departments for each business unit, in addition to the central organisation for Security. Significant progress has been made in the past year but another growth path is still needed to achieve the requisite level of maturity. Improvements have been implemented in various safety areas, which has increased safety. Occupational risks and improvement measures for occupational safety have been mapped out and implemented using various risk analyses and evaluations (RAEs). Bringing access gates into use at more and more stations helps increase personal safety in and around trains. NS is affiliated with various governmental bodies and is kept posted of external developments in the safety landscape. Additionally, NS has reassessed the cybercrime risks and has made adjustments where necessary to ensure continuous improvement in this area.

Risk control trend

The safety of our staff, passengers and environment are a top priority. The level of control in this area was already good and has remained so thanks to the developments mentioned above and is therefore unchanged. Despite the measures, NS cannot rule out safety incidents occurring. According to the National Coordinator for Counterterrorism and Security, the general threat level of terrorist acts in the Netherlands remains high.

Residual risk

Medium. The current risk profile does not yet fully match the desired risk profile.

Inadequate operating result

Description

The risk that, due to costs rising faster than revenue, NS fails to generate the desired return. As a result, NS fails to generate a satisfactory operating profit or operating cash flow, meaning that it is unable to realise its strategy in the future.

Explanation

NS investigates the effects of external developments on its position in the market. Because of the capital-intensive nature of NS, the company's cost structure is relatively fixed. Over the next few years, NS will have to invest substantially to facilitate the growth in passenger numbers and fulfil franchise obligations and undertakings to stakeholders.

Measures

NS has started initiatives to ensure improvement of results in the financial column and in the business units. In addition to financial interests, we will also consider social and commercial interests. NS looks at staff, rolling stock and the service model. A stress test for disappointing growth has been worked out; the results will be used in the business planning process. Furthermore, NS prepares scenarios to determine a future strategy based on the risk appetite.

Risk control trend

NS has taken measures to achieve improvements in the results, whereby it aims not only to reduce costs but also to increase productivity and revenues. Improving the result has lower priority though than improving the operational performance, to make sure that the targets for the most important franchise KPIs for 2019 will be met. Many of the measures have not been completed yet, so the effect on the benefits side is still uncertain.

Residual risk

High. The current risk profile does not yet fully match the desired risk profile.

Market regulation

Description

The risk that politicians decide to split up the main rail network franchise, have a public tender for all or part of the franchise or to split off NS Stations, which would lead to a loss of some NS business operations and put pressure on the performance delivered to passengers.

Explanation

The coalition agreement contains a few stated intentions relating to the regulation of the railways that might affect NS. This includes uncertainty about the market regulation of the railways after the current main rail network franchise ends and the ownership and commercial operation of NS stations as of 2025. Both themes will be dealt with explicitly in the midterm review. The coalition agreement also states that the HSL South will be put out to tender if NS fails to meet the agreed performance standard for the third time in a row, and expresses the intention to take three regional railway lines out of the main rail network and put them out to tender, and to convert ProRail into an autonomous administrative authority.

Measures

Various improvement programmes are being implemented within NS. These programmes should have an effect on our performance, making it good enough to increase the likelihood of a private tender to award the main rail network franchise. A team has also been established to put together NS's offering for passengers for the years after 2024.

Risk control trend

The risk remains high, and NS will do everything possible to make sure it can continue to deliver good performance.

Residual risk

High. The current risk profile does not yet entirely match the desired risk profile.

NS's investments abroad

Description

The risk that NS's investments abroad cost money rather than bringing it in.

Explanation

Abellio is a fully-owned subsidiary of NS and 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 2017, the ScotRail franchise in the United Kingdom showed disappointing results, while the expectations relating to passenger growth and revenue growth for the Greater Anglia franchise have become less predictable. Despite various improvement initiatives, passenger revenues are lower than expected. The reasons for this are: a) disappointing economic growth resulting from uncertainty regarding the consequences of Brexit; b) patterns of passenger behaviour that deviate from trends, as a result of which initiatives aimed at passenger growth are failing to have the desired effect; c) dependency on Network Rail to deliver infrastructure projects on time.

In Germany, revenue growth will be achieved over the next few years from €246 million in 2017 to over €677 million in 2020. This is because a number of franchises have been won that will become operational in the next few years, after the mobilisation for these franchises has been completed. Preparations are required during this mobilisation phase, such as recruiting and training staff, purchasing trains and preparing workshops for the maintenance of trains. The mobilisation for each franchise requires meticulous preparation and investments in time and money by Abellio Germany, while we run the risk that everything will not be completed on time for the start of the franchise.

Measures

In 2016, NS completed the agreements with its shareholder concerning the total financial resources designated for Abellio's international activities. Based on the agreements made, NS will limit the risk to providing group guarantees and the invested capital. The size of the risk for certain franchises will be limited by entering strategic partnerships, as in Greater Anglia and West Midlands: Mitsui has a stake of 40% in the franchise in Greater Anglia and Mitsui and Japanese Railways East (JRE) have a joint 30% stake in West Midlands. Abellio has started various initiatives that should support the operating results. Abellio UK is for example setting up workflows to identify and implement growth initiatives and analyse passenger behaviour. Close consultations are being held with Network Rail about the infrastructure projects with the aim of limiting the impact of these projects on the timetable.

In Germany, the mobilisations are being prepared thoroughly using a programme approach with experienced managers. The execution is also being closely monitored to control the risks of delays and budget overruns. 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 lead to results in the short and medium term. It is still expected that all franchises will make a net positive contribution to the result over their term.

Residual risk

Medium. The current risk profile matches the desired risk profile.

Non-compliance

Description

The risk that NS fails to comply with legislation and regulations, such as the General Data Protection Regulation, or that NS violates internal or external norms and values, which may cause disadvantages for passengers, staff or other stakeholders, reputation damage, financial losses or sanctions from supervisory authorities.

Explanation

NS aims for controlled business operations, in which incidents are rare occurrences and legislation and regulations are complied with. To reduce the number of incidents, a number of conditions have to be met. These include a safe environment where incidents can be discussed in an open manner, which allows a better understanding of the background to incidents. By learning from reports and situations, NS can generate insights and take measures to prevent recurrences.

New and changed legislation and regulations must be translated into concrete policy to make sure that they can be implemented in the organisation with supporting processes and systems.

Measures

The Integrity & Compliance department has been a separate entity reporting to the Chief Governance, Risk & Compliance Officer since 1 January 2017. This department was expanded further in 2017. An internal communication portal has been set up for topics associated with integrity and compliance. The information in this Integrity Portal is regularly amended and supplemented in response to the latest developments. In 2017, the new NS scheme for reporting integrity issues (including 'whistle-blower' reports) came into effect. This scheme replaces the NS procedure for whistle-blowers. The NS Integrity Desk ensures that irregularities or suspicions of irregularities can be reported safely.

To promote consciously ethical conduct, a culture programme has been started with the aim of having lasting safeguards for an ethical corporate culture and permanent attention for conduct and integrity. This programme will be continued in 2018.

Additionally, an understanding of the applicable and changing legislation and regulations is constantly being obtained in cooperation with NS Legal so that NS can respond in good time and deal with consequences for its business operations through policy, procedures and administrative processes. A great deal of attention has been paid to training and knowledge transfer, for example in the form of e-learning and team sessions. Delays or shortcomings on the part of NS in compliance with legislation and regulations may also result in reprimands, fines, court cases, claims and reputational damage. A lot of time and energy is currently invested in translating the General Data Protection Regulation, which will be effective as of May 2018, into concrete policy and knowledge transfer within the organisation to make sure that the proper preparatory measures are taken, with the aim of having NS compliant with the General Data Protection Regulation on time.

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 2017, and additional steps have been planned for 2018. This has improved our risk control.

Residual risk

Medium. The current risk profile does not yet entirely match the desired risk profile.

Finances in brief

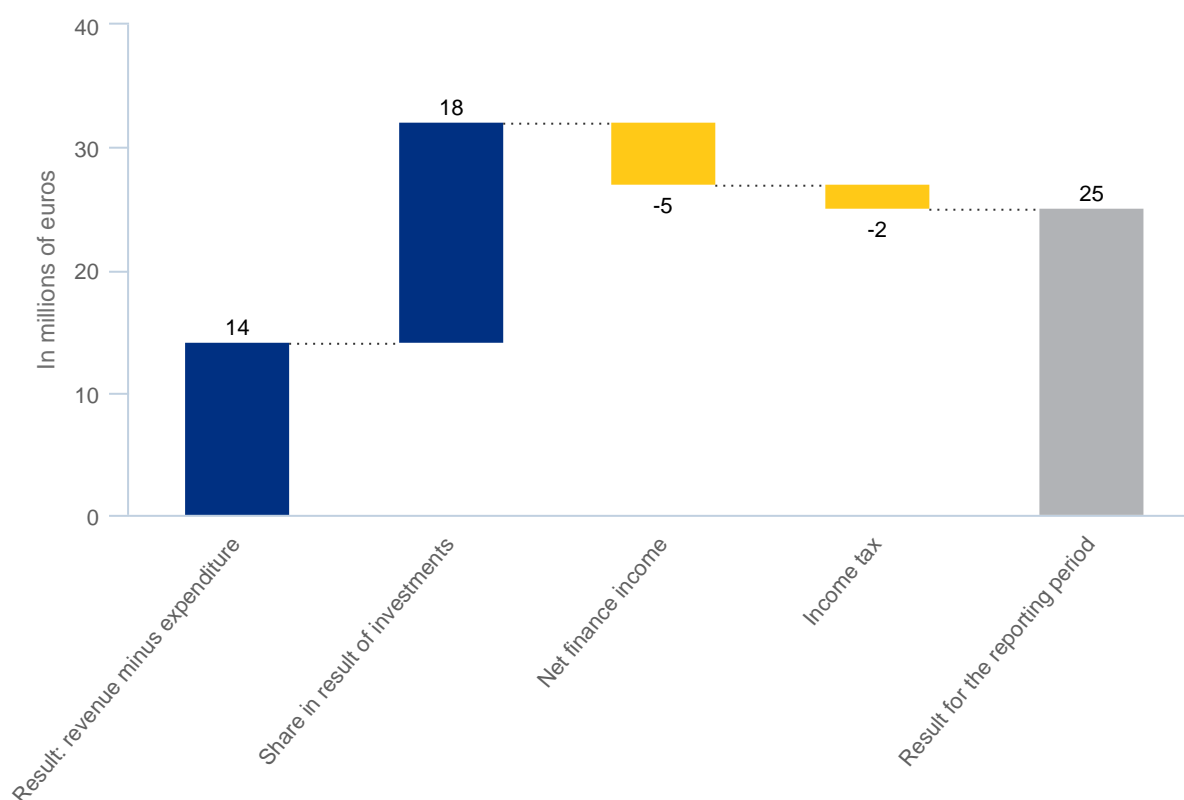


NS had revenues in 2017 of €5,121 million, an increase of 0.5%. When adjusted for the sale of Qbuzz and the effect of the pound sterling exchange rate, the increase was 4.8%. NS invested €618 million last year, mainly in trains. NS achieved a profit from operating activities of €32 million (€270 million in 2016), with an associated net profit over 2017 of €24 million (€212 million in 2016). The profit from operating activities excluding exceptional income and expenditure, such as the sale of property funds, was €131 million, €14 million less than in 2016 (€145 million).

Consolidated income statement 2017 for NV Nederlandse Spoorwegen

(in millions of euros)	2017	2016
Revenue	5,121	5,093
Operating expenses	5,107	4,965
	14	128
Share in result of investments, accounted for using the equity method	18	142
Result from operating activities	32	270
Net finance income	-5	-9
Pre-tax profit	27	261
Income tax	-2	-49
Minority interests	-1	0
Profit for the period	24	212

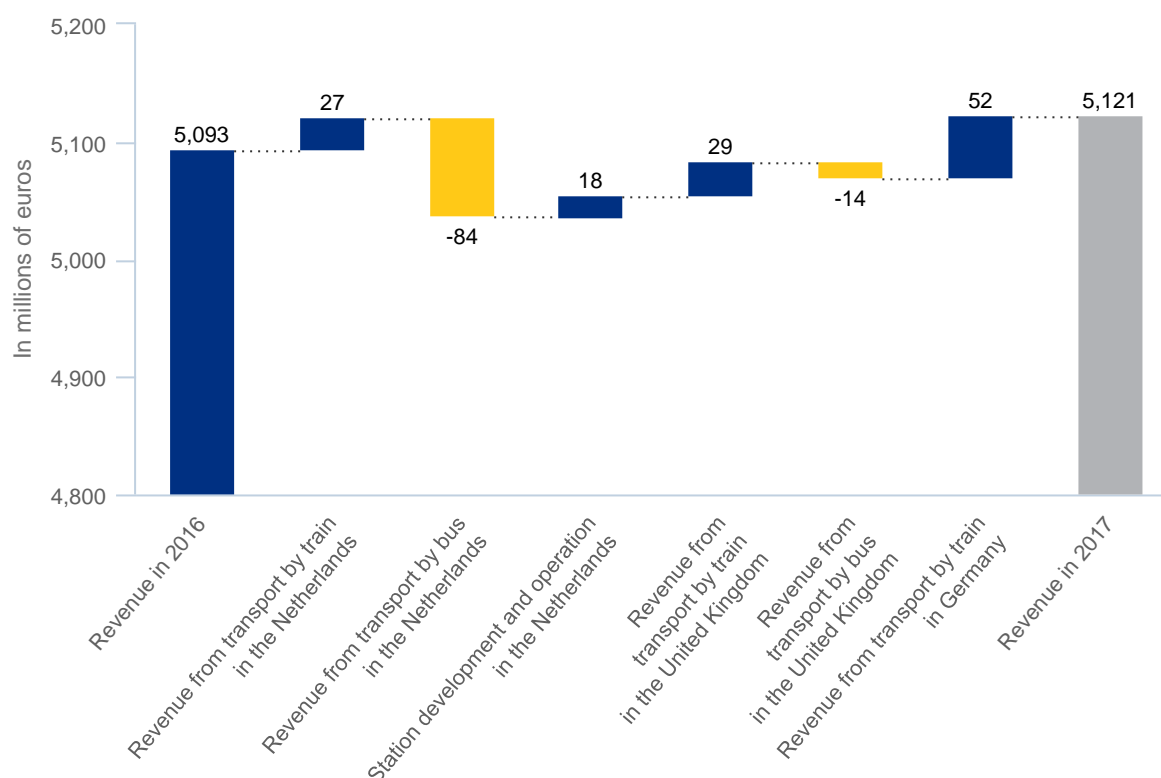
Income statement 2017



Operating revenue

Revenue was €5,121 million in 2017 compared with €5,093 million in 2016, an increase of 0.5%. The revenue was affected by the fluctuations in the pound sterling exchange rate and the sale of Qbuzz on 31 August 2017. When adjusted for the sale of Qbuzz and the exchange rate effect, the increase was 4.8%.

Operating revenue



Revenue in 2016	5,093
Revenue from transport by train in the Netherlands	27
Revenue from transport by bus in the Netherlands	-84
Station development and operation in the Netherlands	18
Revenue from transport by train in the United Kingdom	29
Revenue from transport by bus in the United Kingdom	-14
Revenue from transport by train in Germany	52
Revenue in 2017	5,121

Revenue in the Netherlands (€3,132 million in 2017, €3,172 million in 2016)

Revenue from transport by train in the Netherlands

The revenue from train transport increased by 1.1% to €2,441 million. When an adjustment is made for the fact that NS is no longer operating the Limburg and Hoekse Lijn franchises, revenue increased by 1.7%. Growth was partly due to the annual price indexation (0.4%) and a growth in volume, i.e. the number of passenger-kilometres (0.8%). NS achieved higher revenues largely through more revenue from individual journeys in both the social/recreational market and the commuting market (2.2%) and through more revenue from students with a

student public transport pass (3.2%). The rise in the number of student public transport passes is primarily because they also became available for students younger than 18 at vocational colleges (MBO) as of January 2017. Furthermore, the conditions for student financing changed in Q4 2017, as a result of which all students qualify for the student public transport pass sooner. The upturn in the economy and growing purchasing power had a positive impact on revenues. The number of people in employment (an important measure affecting peak-hour traffic) grew by 2.0% in 2017.

Revenue from transport by bus in the Netherlands

Revenue from bus transport in the Netherlands provided by Qbuzz was €129 million, compared with €213 million in 2016. Qbuzz was sold on 31 August 2017 to Busitalia.

Revenue from station development and operation in the Netherlands

Revenue from station development and operation in the Netherlands increased by €18 million in 2017 to €562 million. This reflected increased rental income and a rise in retail sales. 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 (€1,743 million in 2017, €1,727 million in 2016)

Revenue from transport by train in the UK

The revenue from transport by train in the United Kingdom provided by Abellio increased by 9% in 2017 when denoted in pounds sterling. When converted into euros, the revenue was €1,546 million, an increase of €29 million on 2016 (€1,517 million). The revenue from the West Midland Trains franchise (€37 million), which started on 10 December, is consolidated in the figures for 2017. The lower average value of the pound in 2017 compared to the average value in 2016 had a negative impact on the revenue when denoted in euros of €108 million.

Revenues from transport by bus in the United Kingdom

Revenue from transport by bus in the UK provided by Abellio in euros decreased from €211 million in 2016 to €197 million in 2017, entirely attributable to the fall in the value of the pound sterling relative to the euro. In pounds, revenue in 2017 remained virtually the same as in the previous year.

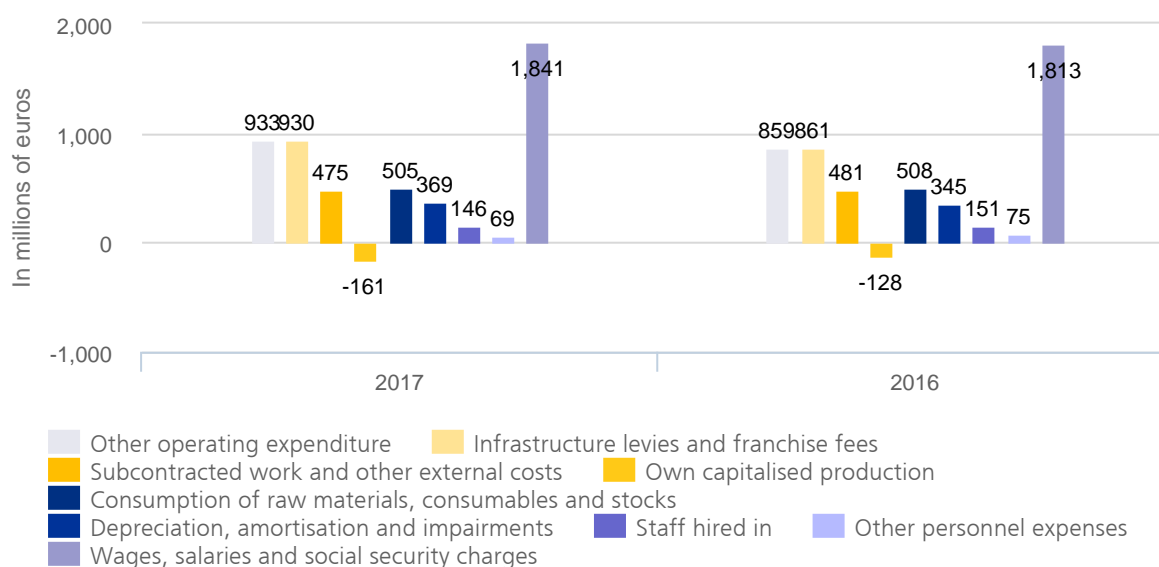
Revenue in Germany (€246 million, €194 million in 2016)

In Germany, Abellio recorded higher revenues of €52 million. Growth came from the start of the Niederrhein-Netz franchise in December 2016 and from the full consolidation of WestfalenBahn as of 6 December of this year by extending the share capital from 25% to 100%.

Operating expenses

The operating expenses of NS rose by €142 million from €4,965 million in 2016 to €5,107 million in 2017. This was mainly due to higher costs for the infrastructure levy and franchise fees (€69 million) and increased 'other operating expenses' (€74 million).

Operating expenses



(in millions of euros)	2017		2016	
	€	%	€	%
Wages, salaries and social security charges	1,841	37	1,813	37
Other personnel expenses	69	1	75	2
Staff hired in	146	3	151	3
Depreciation, amortisation and impairments	369	7	345	7
Consumption of raw materials, consumables and stocks	505	10	508	10
Own capitalised production	-161	-3	-128	-3
Subcontracted work and other external costs	475	9	481	10
Infrastructure levies and franchise fees	930	18	861	17
Other operating expenditure	933	18	859	17
Total operating expenses	5,107	100%	4,965	100%

Wages and salaries

Wages, salaries and social security charges rose by €28 million from €1,813 million in 2016 to €1,841 million in 2017.

When adjusted for the sale of Qbuzz in 2017, the increase for the Netherlands was 6.1%. This increase was caused by the pay rise due to the collective labour agreement (CAO) of 2.0% as of 1 January 2017 based on the 2015-2017 CAO, and 2.3% based the CAO agreed as of 1 October 2017. Furthermore, we faced higher pension and social security contributions and the inclusion of the supplement for irregular hours in the holiday pay following changes in the regulations. The increase in the average FTE count was 3.9%, up to 18,758 FTEs. This increase can be seen in the operational jobs (particularly in Safety and Service).

The rise in wages and salaries in the United Kingdom after eliminating UK exchange rate effects is 6%. This is caused by the growth in franchises. The average FTE count rose by 2.3% to 10,402 FTEs. The exchange rate effect is €40 million.

In Germany, the effect of the rise in wages and salaries is 24.2%, which was caused by the start of the Niederrhein-Netz franchise in December 2016 and by the consolidation of WestfalenBahn as of December 2017 (adding 300 FTEs in December 2017). The average FTE count rose by 24% to 1,105 FTEs.

Depreciation and amortisation

Depreciation and amortisation (including impairments) rose by €24 million, mainly from the commissioning of rolling stock and a correction made to the depreciation and amortisation in the past.

Infrastructure levies and franchise fees

The access charges for the rail infrastructure (infrastructure levy plus franchise fee) increased by a total of €69 million to €930 million. The costs were in €443 million in the United Kingdom (€389 million in 2016) and €106 million in Germany (€89 million in 2016).

Other items

The 'other operating expenditure' rose by €74 million in 2017, mainly because of the fine of €41 million imposed by the Authority for Consumers and Markets (ACM) and higher costs for the lease of train rolling stock by Abellio UK (€18 million) and Abellio Germany (€12 million), caused by growth within existing franchises and the start of new franchises.

Underlying result from operating activities

Our financial position needs to be sound if we are to achieve our ambitions. Investments must produce sufficient returns to ensure the company's continued existence. This is also in the public interest. The development in the underlying result from operating activities is a good yardstick for this. It shows the result from operating activities after eliminating exceptional items.

(in millions of euros)	2017	2016
Result from operating activities	32	270
Abellio pensions contribution	26	22
Settlement of various claims	14	-23
Book profit on property funds	0	-117
Impairment of stations and correction to write-off costs	30	26
Correction mechanism for the franchise fee	-18	-18
Fine imposed by the ACM	41	0
Miscellaneous	6	-15
Underlying result from operating activities	131	145
*) Of which the underlying result of foreign activities was	53	53

The underlying operating profit fell by €14 million in 2017 to €131 million (from €145 million in 2016). The sale of Qbuzz was the principal reason for the fall in the underlying result.

Cost levels in the Netherlands will remain relatively high in the coming period because NS will be making every possible effort to achieve the KPIs agreed for the main rail network and to make sure that the HSL rolling stock is introduced smoothly.

ROE

The return on equity (ROE) decreased to 0.7% in 2017 (6.2% in 2016). Based on the underlying result, the ROI fell from 3% in 2016 to 2.7% in 2017. In the longer term, NS seeks to achieve a return on invested capital that is in line with the market. The return achieved in 2017 is insufficient, and the financial outlook for the long term is challenging. NS is working on improving controls, speeding up maintenance activities through Pitstop and embedding lean management across the organisation. This should lead both to top-quality processes and to better financial results. The first steps have been taken by increasing the quality and improving the cost efficiency of the support departments.

Net finance income

The net finance income was a negative sum of €5 million (negative amount of €9 million in 2016). The finance income has improved with respect to 2016 as a result of lower finance costs due to repayments made at the end of 2016. New loans were arranged at the end of 2017 but the average debt position during the year was lower. Furthermore, a one-off income item arose from a release of provisions for a cross-border lease due to terminate at the beginning 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 subject to corporate income tax was 7%, compared to 19% in 2016. The tax charge in 2017 was €2 million (in 2016 this was €49 million). It can be broken down as follows:

Result before tax	27
Income tax based on Dutch tax rate (25%)	-7
Effect of participation exemption	8
Effect of transferring rolling stock from Ireland to the Netherlands	-85
Effect of variant tax rates in foreign jurisdictions	17
Effect of upward adjustment in deferred tax assets resulting from higher future taxable profits in the Netherlands	67
Effect of upward adjustment in deferred tax assets at Abellio Germany	5
Effect of non-deductible ACM fine	-10
Effect of additional tax liability for 'various costs', investment tax credit, etc.	3
Income tax 2017 (7%)	-2

The effect of the participation exemption (€8 million) covers inter alia the disposal of the shares in Qbuzz.

The effect of the rolling stock being transferred from Ireland to the Netherlands (-€85 million) consists of the change to the tax treatment of the lease rentals over the period 2013-2017 (-€97 million) and the effect of the lower Irish tax rate on the profit realised on the actual transfer of the main rail network rolling stock from Ireland to the Netherlands (€12 million). That is the result of the agreement with the tax authorities of Ireland and the Netherlands about the market value of the rolling stock being transferred and of the completion of the tax audit that the Dutch tax authority had initiated into the tax treatment of the lease contracts that the Dutch companies had signed.

The effect of the differing tax rates in foreign jurisdictions (€17 million) is determined in particular by the lower Irish tax rate for the ordinary profit of NSFSC (€15 million). The remainder refers to the differing tax rates in the United Kingdom and in Germany.

The effect of the upward valuation of the Dutch component of the deferred tax asset (€67 million) is the consequence of the higher expected profits of the group tax entity in the Netherlands because of the transfer of the main rail network rolling stock. The effect of the upward valuation of the German component of the deferred tax asset (€5 million) is the consequence of the higher expected profits of Abellio because of the bids that it won.

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. The figures in 2017 were €402 million for the Netherlands, €9 million for Germany and €124 million for the UK. 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 revenues. Most of NS's revenues are taxed at the lower or zero rates of VAT. Net VAT receipts VAT within the group tax entity in 2017 were €79 million. In Germany this resulted in net receipts of €29 million; there were net receipts of €185 million in the UK. Corporate income tax is paid on the taxable profit. Net tax payments in the Netherlands in 2017 amounted to €15 million. In Ireland, €135 million was paid, mainly because the transfer of rolling stock from Ireland to the Netherlands, which meant that a deferred tax liability became payable with immediate effect. €1.2 million was paid in the United Kingdom.

Profit for the period under review and profit appropriation

A profit of €24 million was recorded in 2017. A proposal will be made to pay a dividend of €8 million, which is 35% of the profit for 2017, and to add the remaining €16 million to the reserves.

Equity

At the end of the year under review, equity was €3,477 million (€3,511 million in 2016). The profit for the reporting period of €24 million was credited to the equity. The return on equity was 0.7% in 2017 (2016: 6.2%). Solvency, at 56%, was slightly up on last year (2016: 55%).

Investments

NS invested €618 million in 2017 (€791 million in 2016), mainly in trains for implementation of the HSL solution, New Generation Intercity trains, New Generation Sprinter trains, Stadler FLIRT trains, the overhaul and modernisation of the VIRM-1 trains and changes to the maintenance centres to enable the maintenance of the new rolling stock. NS made joint investments with ProRail in the Amsterdam Centraal, Utrecht Centraal and Den Haag HS stations, among others. Investments were also made in IT systems for managing rolling stock and staff, and in customer service systems such as the journey planner, which is aimed at improving the door-to-door journey for passengers.

Financing

The net cash flow from operating activities was an outflow of €10 million (inflow of €891 million in 2016). This was caused by the lower operating profit and an increase in the working capital of €221 million (in 2016, this decreased by €287 million), because the advance for the student public transport pass at year-end 2016 was received in 2017, whereas the advance for 2018 was only received in January 2018. In addition, the deferred tax liability in Ireland that became due immediately as a result of the transfer of the rolling stock to the Netherlands was paid (€101 million).

The investments required a net cash outflow of €455 million (€184 million in 2016).

The net cash inflow from financing activities was €296 million (outflow of €640 million in 2016) due to the net take-up of a number of loans in 2017 worth €375 million (compared with repayments of €599 million in 2016). In addition, a dividend of €79 million was paid to the State in 2017.

The above resulted in a negative cash flow of €169 million (positive cash flow of €67 million in 2016).

Financial position

The robustness of NS's financial position is clear from the structure and the composition of its capital, the available cash and cash equivalents and the fact that it has committed credit facilities, and off-balance-sheet items, mainly operating lease commitments. Standard & Poor's (S&P, a leading credit rating agency that investigates the financial position of companies) has given NS Groep NV a credit rating of AA- with a stable outlook (based on an underlying credit profile of single A-, currently raised by three levels in recognition of the relationship with the shareholder, the Dutch State). In part because of the main rail network franchise for 2015-2024, NS is currently investing heavily in trains, stations and systems and will continue to do so over the next few years. 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 €4 billion in the period through to 2022. The realisation of these improvement initiatives will require a substantial effort from everyone at NS over the next few years. Furthermore, commitments worth around €3.8 billion have been entered into for leases for the franchises in the United Kingdom and Germany.

Key financial figures

	2017	2016
Relating to the capital position		
Capital base/total assets	56%	55%
Current assets/current liabilities	0.8	0.9
Working capital (in millions of euros) *	-565	-779
Total assets (in millions of euros)	6,214	6,359
Relating to profitability		
Result from operating activities/operating revenue (ROS)	0.6%	5.3%
Result from operating activities/average invested capital (ROI)	0.7%	5.7%
Profit for the period/average equity (ROE)	0.7%	6.2%

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

NS and taxes

Taxes are the main source of income for governments, which use the money to fund general provisions. These general provisions are vitally important to NS. One example would be the rail infrastructure. NS believes it has a duty to handle taxes in a socially responsible manner. NS is a fully owned state participation and that brings particular responsibilities with it.

Our guiding principle is therefore that NS acts in accordance with tax legislation and regulations, whereby it takes account of the objectives and spirit of the law. This means that the literal text of tax legislation is not the only deciding factor. 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. NS considers this to be the case if the tax consequences of a transaction are proportionate to the commercial consequences.

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, to make sure that we are complying with the applicable tax legislation and to make use of tax incentives, for example for research and development or sustainable investments.

Relationship with the tax authorities

NS thinks it is important to have a good relationship 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. Key to this are mutual trust, understanding and transparency. Based on this covenant, NS consults with the Dutch tax authorities on issues where there could be differences of opinion. 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 Tax and Customs Administration 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. Abellio has a Customer Relationship Manager for the tax authority in the United Kingdom, for example, with which Abellio wants to discuss the current issues.

Governance

The tax department at NS has an advisory and coordinating role on tax matters for the Executive Board, the business units and the Tax and Customs Administration in the Netherlands. The department is also the point of contact on tax matters for other internal and external stakeholders. Outside the Netherlands, the tax department's contacts with the tax authorities generally go via the local subsidiary. 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 in particular called upon to assist in the case of a complex issue or issues where there is a great deal of uncertainty.

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.

Transparency

NS is transparent about its tax position. In this annual report, we show the amount of corporate income tax, payroll tax and VAT that NS pays in each country. We also report on the effective tax burden for corporate income tax and give detailed information of deferred tax assets and liabilities. Furthermore, the auditor describes its work and observations concerning the tax position and tax risks in the combined audit report.

About the lease activities

In the late 1990s, the Dutch central government decided to let regional authorities issue calls for tenders for unprofitable regional railway lines as franchises. NS realised that this plan could lead to a third of its rolling stock becoming surplus to requirements. After considering a number of alternatives, NS decided to set up its own lease company. This is because the service life of trains is longer (at an average of 30 years) than the duration of franchises (10 years on average). NS decided to run its lease activities through NS Financial Services in Ireland because of the attractive investment climate in that country. Some years later, the Dutch government decided in the light of European rail legislation to turn the service on the main Dutch rail network into a franchise as well. This meant that the rolling stock that NS uses on the main rail network was now also at risk of becoming surplus to requirements. That is why NS then started leasing new rolling stock for the main rail network through NS Financial Services.

In early 2015, NS reached an agreement with its shareholder, the Ministry of Finance, on the lease of trains from abroad. The basic principle is that NS will no longer lease trains from abroad in markets where a level playing field is guaranteed. Given that the Dutch main rail network franchise was granted to NS in a private tender, new trains for the main rail network are no longer leased from Ireland as of 2015. The agreement was also made to phase out the Irish lease portfolio for existing trains on the main rail network. This process has now been completed ahead of schedule. Given that the commercial arguments for leasing trains still apply, NS has set up a new lease company in the Netherlands that covers all the trains in the main rail network.

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 in Netherlands. Leasing trains is a commonly used approach for franchise tenders. Other public transport companies use this method.

These public transport companies, which compete with NS, do in principle have the ability to make use of foreign leasing companies within the limits set by legislation and regulations and the conditions set by the franchise authorities. In future tender procedures, such a competitive disadvantage for NS can only be avoided if a level playing field is created in another way, for example in the conditions set by the franchise authority or through legislation and regulations that makes it impossible to use foreign lease companies. In foreign franchises, NS works to achieve a level playing field by actively approaching the franchise authorities, in accordance with the agreement it made with the Ministry of Finance.

Our impact on the environment and on society



More than 1.2 million trips by train and bus every day mean that NS has a major impact on society in the Netherlands: in mobility, safety, emissions and expenditure. We express the positive and negative environmental and socioeconomic effects on our surroundings in euros in order to present a transparent picture of the breakdown and scale of this social impact. More information about the background to the impact analysis is available at www.ns.nl/mvoberekeningen.

Our impact in a nutshell

The diagram below shows developments over the past two years and the relative scale of the social impact. Our social impact has improved in virtually all areas. Passengers travelled 150 million kilometres more by train in 2017 compared with 2016, which means that our positive social impact on mobility and safe travel with respect to cars has improved once again. As trains and buildings used only wind energy in 2017, this improved our environmental impact.

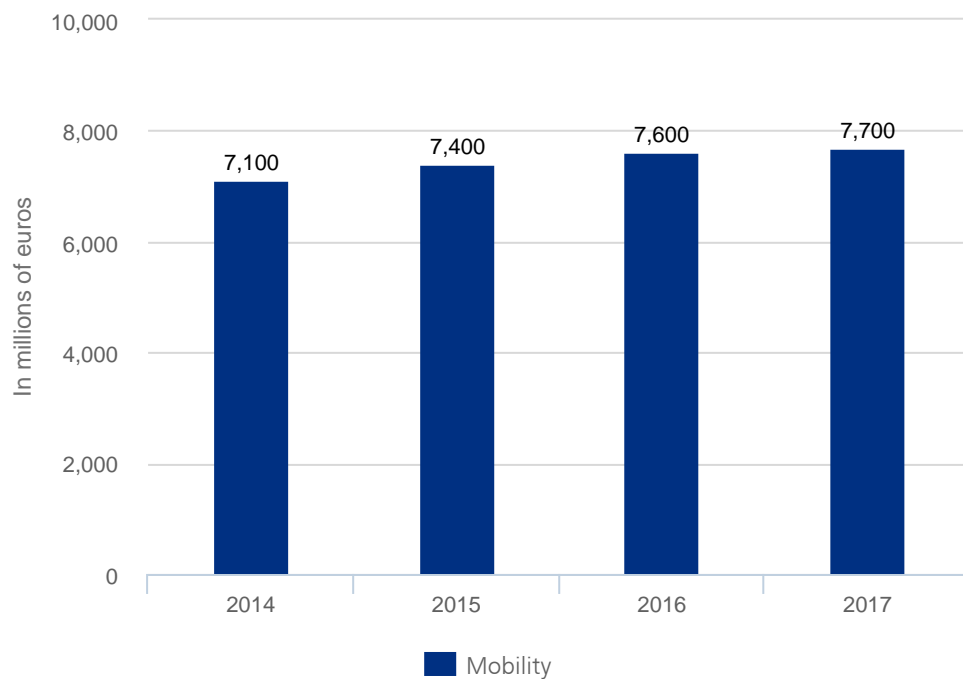
Social impact of NS	Impact in 2017	% w.r.t. 2016 (millions of euros)	% w.r.t. 2015	Positive impact w.r.t. cars	% w.r.t. 2016 (millions of euros)	% w.r.t. 2015
mobility	€ 7,652	1%	4%		N/A	
expenditure	€ 1,413	2%	11%		N/A	
training	€ 12	9%	21%		N/A	
journey time	€ -5,580	1%	2%	under development (see case study)		
environment	€ -85	-20%	-32%	€ 283	4%	10%
safety	€ -113	0%	0%	€ 611	2%	5%

Key developments in 2017

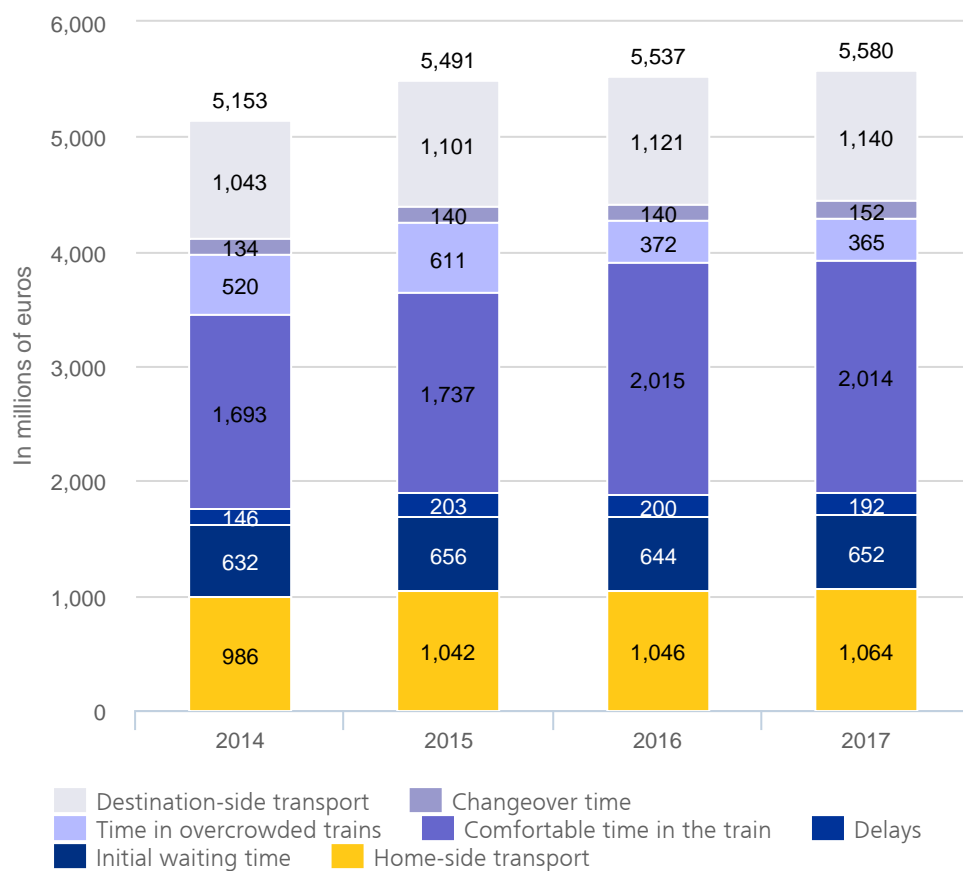
Socioeconomic impact of mobility and journey time

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 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 a minimum of €76 billion, at €0.40 per passenger-kilometre. €7,652 million of that can be ascribed to NS (€7,553 million in 2016, following recalculation).

Mobility



Journey time



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 €5,580 million in 2017 (€5,537 million in 2016, following 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 overcrowded trains has improved substantially thanks to measures taken by NS to deal with overcrowded trains, such as the deployment of more rolling stock.

To improve the social impact of mobility, NS aims to provide accessible and affordable public transport. We are trying to minimise journey times. Since the 2018 timetable introduction, trains have been running between Amsterdam and Eindhoven every ten minutes, improving seat availability. We are also seeking to reduce journey times by enabling smooth changeovers between the train and other modes of transport, with the OV-fiets for example, bicycle parking facilities and by providing the best possible journey information. We are also improving comfort through a better spread of passengers throughout the peak periods, by deploying new rolling stock, and by offering facilities such as quiet zones and Wi-Fi in the train. This makes it possible for passengers to utilise their journey time more effectively, reducing the social costs of journey time.

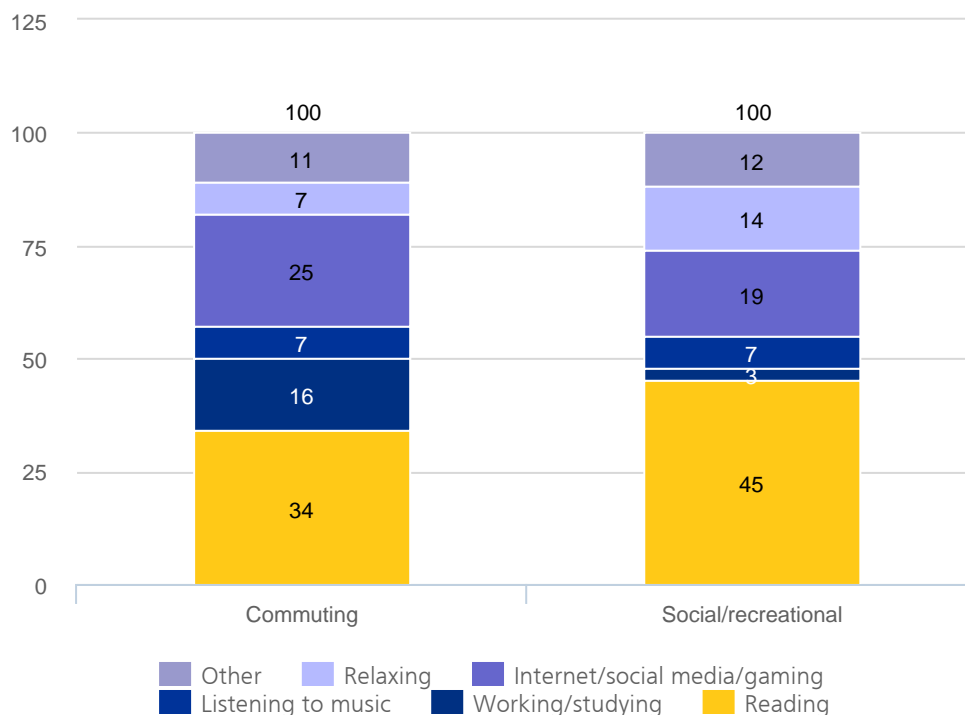
To summarise, the impact analysis shows that 'time is money'. The time for the entire journey needs to be shortened, and passengers must be able to use time spent in the train efficiently and comfortably.

Case study: Time spent in the train

Journey time is traditionally considered to be time lost, and therefore valued negatively. The average negative value of a one-hour train journey ('value of time') is approximately €10. Passengers are willing to invest that time to let them perform an activity that is valuable for them somewhere else. The emergence of IT in particular has caused a shift in the idea that journey time is lost time. As train passengers do not have to keep their attention on controlling the vehicle, there are a number of activities that can be carried out very well in the train. Passengers can spend their journey time usefully or pleasantly, as a result of which journey time is felt less to be time lost and may lead to time savings at another moment of the day. Reasons enough for NS to investigate what activities our customers perform in the train, what they need to let them do so, and to what extent time in the train is experienced as more valuable.

The Delft University of Technology has carried out a study for NS and the Ministry of Infrastructure and Water Management. Approximately 1500 members from the NS panel participated in the study into time spent in the train through a survey. The study helps NS make investment decisions in new trains and their layout. The insights are also useful for refurbishing existing trains. The principal results of the study are explained below.

Favourite ways to spend time in the train



Reading turns out to be the favourite way for rail passengers to spend time in the train. This applies to 34% of commuters and nearly 50% of social-recreational passengers. Most of the passengers read a book or a newspaper (88%). But they also use telephones, iPads, laptops and e-readers. In the train, readers above all need silence and a seat.

In addition to reading, favourite ways to spend time in the train are working, talking and relaxing. Besides requirements such as a laptop or iPad, the right conditions in the train are also required for working: a seat, a table, a power socket and proper Wi-Fi. People who are working do so for approximately three quarters of the journey, more often on the outward journey than on the return journey. In the study we focused on reading, working and listening to music for two groups, commuters and social-recreational passengers. For these ways of spending time, the value of the journey time with and without time spent that way was calculated for each group using mathematical models. The difference between the two is defined as the value of the pastime.

The value of working and listening to music turned out to be insignificant for the social-recreational passengers. But the value of the way of spending time is significant for the other combinations of passenger group and way of spending time. These values vary from €3 per hour to more than €5 per hour. The journey time therefore clearly has value for these passengers. The positive value of time spent in the train already is in the above-mentioned average value of €10 for the 'value of time'. Without the positive value of the time spent in the train, the journey time valuation for these passengers would be €3 to €5 more negative, i.e. €13 to €15.

Table: Value of time spent in the train (€ per hour)

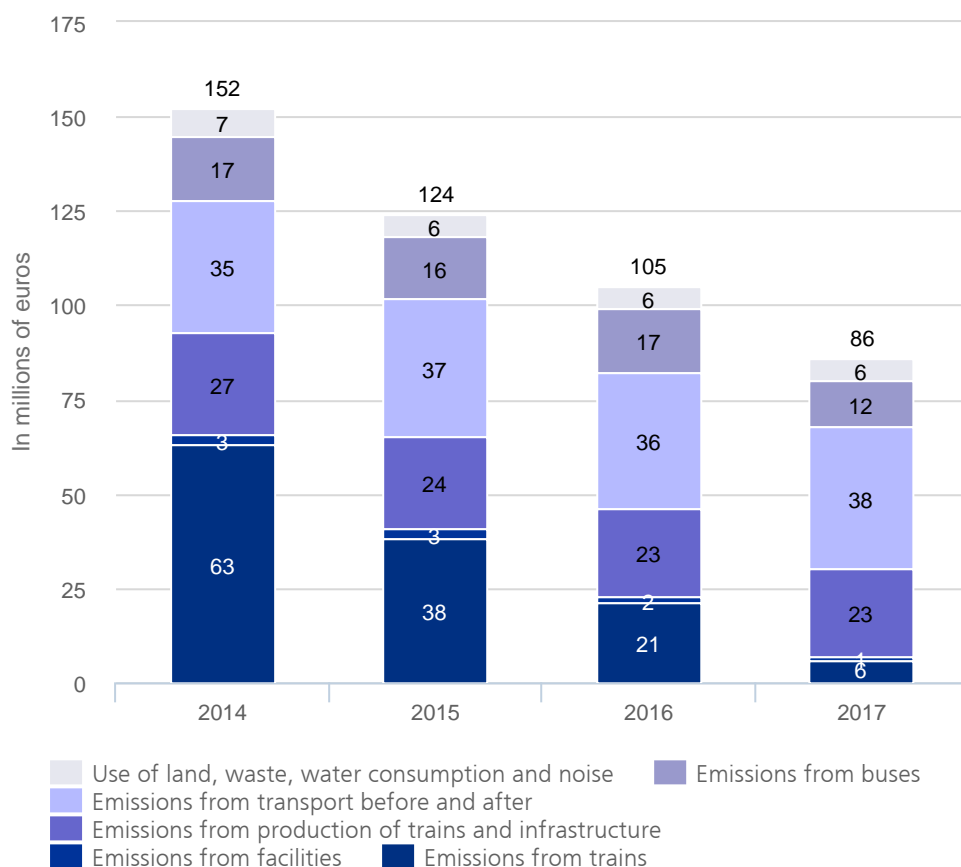
	Commuting	Social/recreational
Reading	€ 4.80	€ 3.00
Work	€ 5.30	-
Listening to music	€ 4.70	-

NS uses the insights from the study to weigh up various types of investments: for example, are we going to invest in trains that reduce the journey time by five minutes or in facilities that let people utilise their journey time more usefully or more pleasantly?

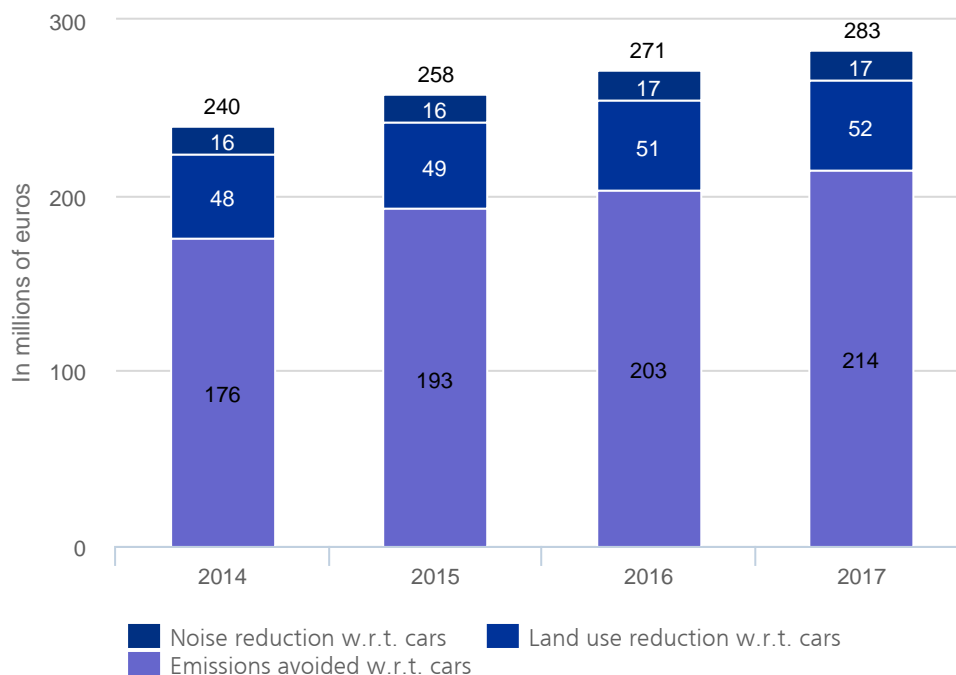
Environmental impact: emissions, land use, waste, water and noise

The negative environmental impact is the result of using fossil fuels. 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. This negative impact is declining at NS because it is increasingly using entirely green power for trains and buildings. 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 in fact, because pollution produced by the train – along with the public transport bicycle – is relatively 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

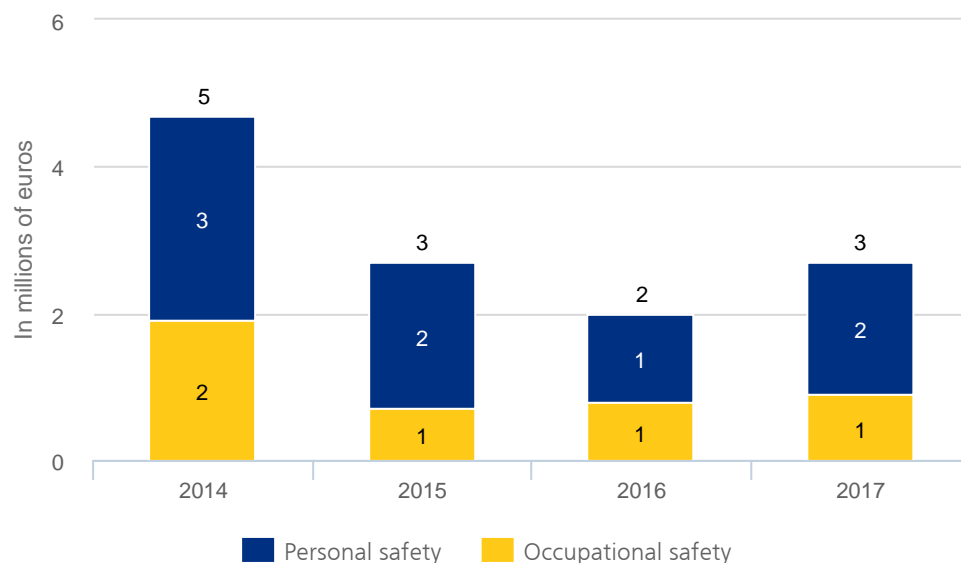


Our negative environmental impact improved by €21 million in 2017, mainly due to the switch to using wind energy from 2015 onwards. This meant that 100% of the energy used by our trains and buildings was from new green power sources in 2017. The positive environmental impact of travel with NS compared to using the car rose to €283 million as a result. The current negative environmental impact was about €85 million (this was €106 million in 2016), breaking down into about €25 million as direct consequences of NS, and about €60 million in the chain as a whole including transport to and from the station, the manufacture of the trains, plus electricity and infrastructure.

Socioeconomic impact of safety

NS 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. 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.

Safety - personal and at work



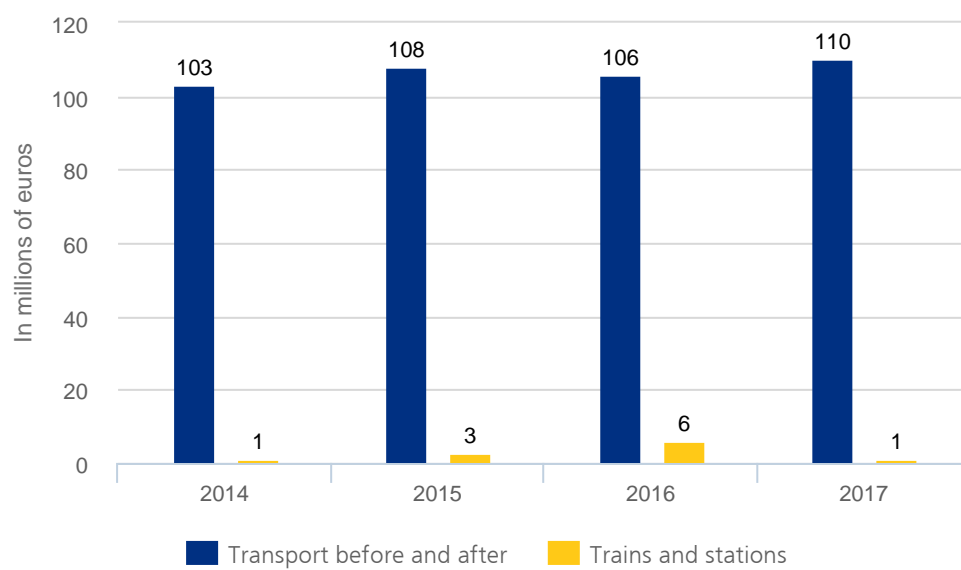
The social costs for safety at work have remained roughly constant for the last three years. NS took further steps in 2017 to reduce unsafe working conditions and encourage reporting of unsafe situations, for instance through sound risk assessment and evaluation reports (RAEs) and by encouraging staff to report unsafe situations.

As regards personal safety, NS has paid particular attention since 2015 to preventing aggression against staff and passengers. Customer satisfaction with personal safety has been improved, while the number of reports has decreased. Unfortunately, there were two cases of serious injuries in 2017, which did not occur in 2016. As a result, the social impact of personal safety decreased to €1.8 million in 2017 compared with €1.2 million last year.

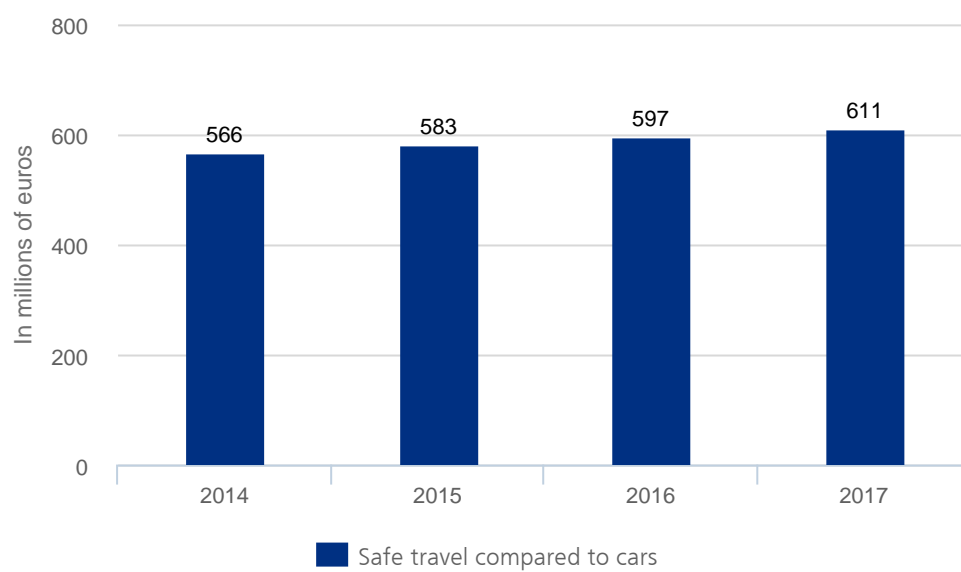
To provide safe travel, NS is working with its partners on preventing collisions and derailments or unsafe situations at the stations. That meant that the social costs came to €1 million in 2017, as opposed to €6 million in 2016. To further improve safe travel, we are continuing to focus on safety instructions and open communication with staff about improvements.

The number of traffic accidents in journeys prior and subsequent to the train journey and their impact is many times greater, at approximately €110 million (€106 million in 2016). 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 €611 million in 2017 (€597 million in 2016, after recalculation).

Safe journeys



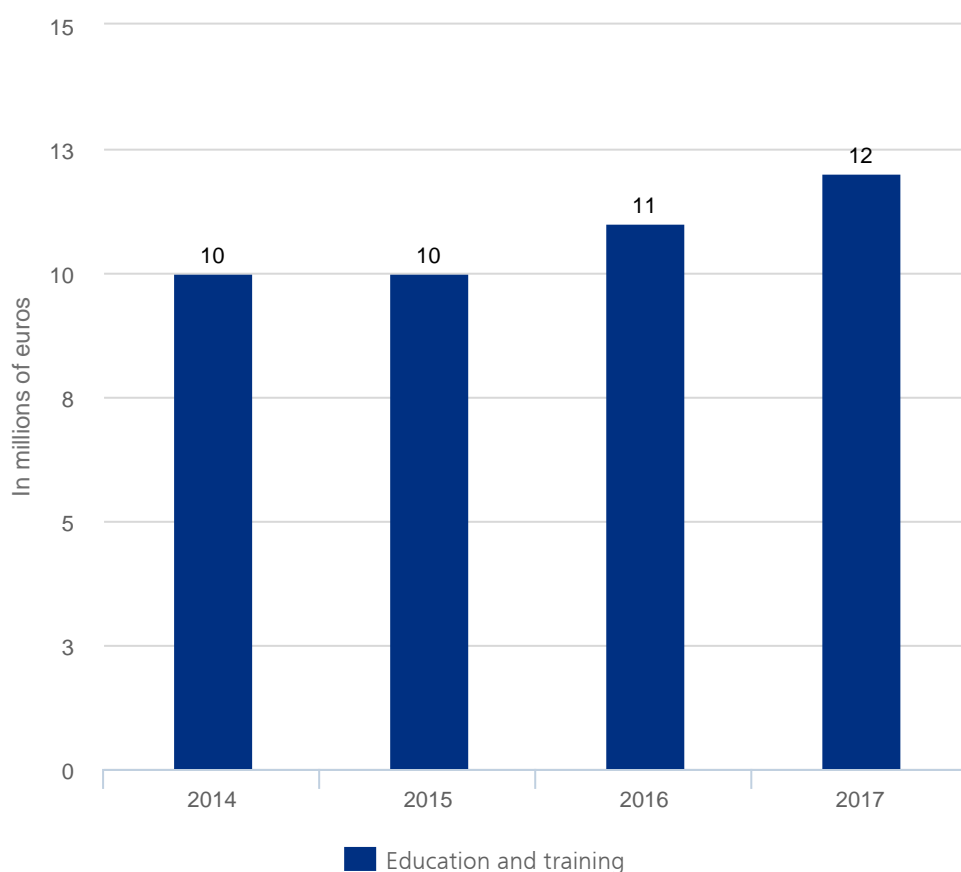
Safe journeys by car



Socioeconomic impact of training, employability of staff and diversity

NS exerts a positive socioeconomic impact on society by developing the knowledge, skills and talents of its 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 2017 were approximately €12 million, which is up on the previous year. This is caused by the growth in the number of staff who have improved their potential at work through training.

Education and training

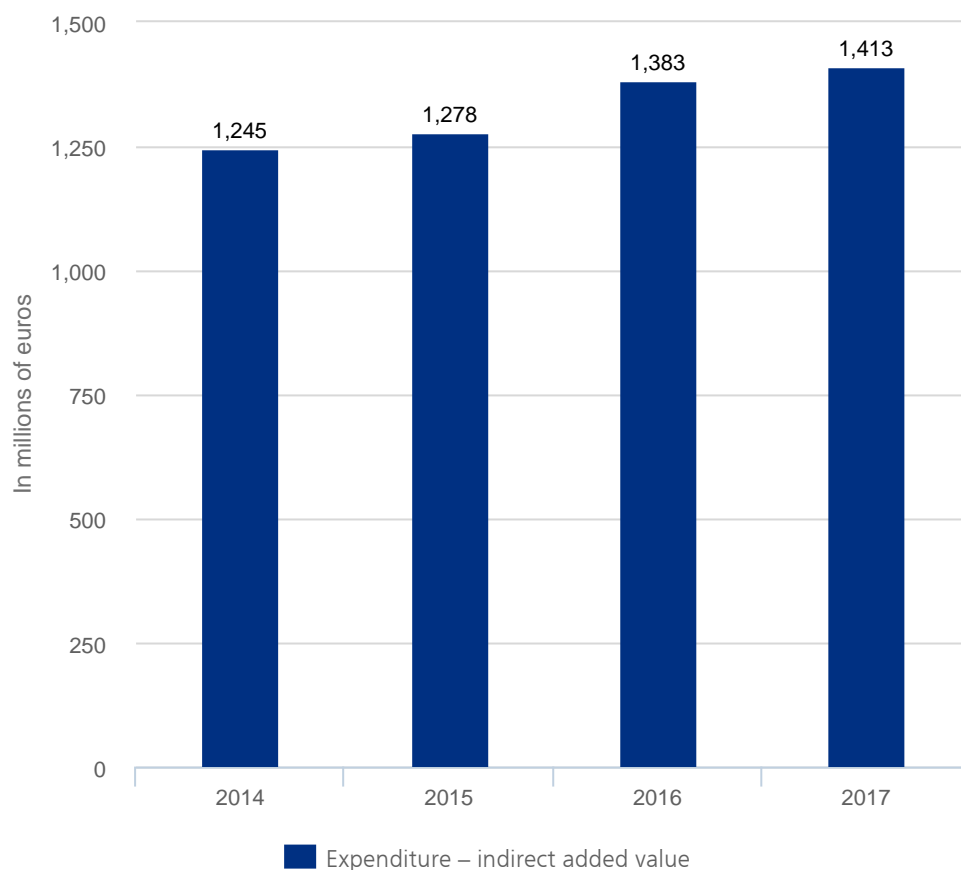


Incapacity for work limits the employability of employees. This has negative social costs, for example because of higher hospital costs and costs of benefit payments, and the loss of productivity and purchasing power. NS wants to improve that impact. NS wants to be a diverse and inclusive organisation 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. We are doing more and more to expand the social benefits of diversity.

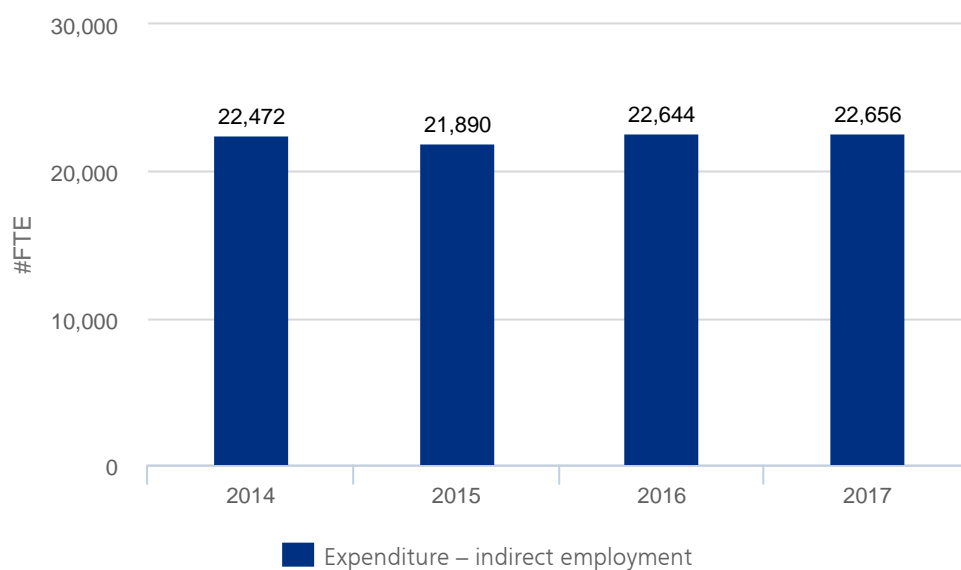
Socioeconomic impact of expenditure

NS has a socioeconomic impact on society through its own expenditure such as procurement, investments and salaries. This means for instance that NS contributes to the added value and employment opportunities at its suppliers. The economic benefits were €1,413 million of added value at suppliers (€1,383 million in 2016), or approximately 22,500 jobs.

Expenditure - indirect added value



Expenditure - indirect employment



NS is able to extend its 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, NS has impact on the areas surrounding its 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.

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 21,000-plus staff enable people's door-to-door journeys in the Netherlands. We welcomed over 5,000 new colleagues in 2017, either starting permanent jobs, or temporary assignments or part-time jobs alongside their study or other work.

The labour market is becoming tighter and tighter. The number of job vacancies is increasing, unemployment is falling and the population is ageing. NS is seeing the effects of this in its recruitment in a number of regions and in crucial professional areas such as technology, IT and retail. We are responding by adapting the recruitment channels to suit the target groups and by using our own staff to help find new colleagues. We also continue to focus on lifelong learning with our own training programmes such as at TechniekFabriek, annual refresher instruction courses and close collaboration with regional vocational education centres.

Staff are given an individual budget that they can use to make personal choices in facilities and activities relating to health and motivation at work. Key factors are maintaining professional skills and developing talent and leadership. This lets us retain our appeal as one of the leading employers in the Netherlands.

Our employees

- At the end of 2017, the NS workforce in the Netherlands comprised 21,835 staff (18,780 FTEs)
- 81% of all NS staff had a permanent contract (2016: 80%)
- Women made up 34% of the workforce at NS (2016: 34%)
- The average age of our employees is 43 (2016: 43)

Recruitment

NS recruits over 5,000 new members of staff every year, more than half of them for the station retail outlets. In 2017, we filled 3,779 vacancies for people with vocational qualifications and 1,011 vacancies for graduates (2016: 3,829 and 722 respectively). In our recruitment, we paid more attention in 2017 to the positioning of NS as an employer. We deployed new recruitment methods and developed an attractive concept that showed the challenges NS is working on. We are recruiting more online and targeting specific groups more. In order to implement the arrangements in the personal safety agreement, NS took on 140 additional chief guards and 60 Safety & Service staff this year. In addition, 19 trainees and 38 work placement students started with us. The hiring desk filled 529 temporary positions with external employees. Furthermore, all these new employees were screened, frequently tested and had to run through 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 2017, women comprised 32% of the senior management at NS (2016: 30%). As in 2016, 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, 50 people with occupational disabilities started work in the retail companies as hospitality or retail assistants. In 2017, 71 people had a 'social responsibility' job (2016: 45). Some employees with an occupational disability transferred from a 'social responsibility' job to a regular job within our organisation. 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 with occupational disabilities. We are imposing this obligation in ongoing contractual agreements and invitations to tender.

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. 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. The 20th participant started in the summer of 2017. The traineeship programme is a success: 90% of the participants have found a graduate-level job within NS or elsewhere after nine months. NS regularly shares what it has learned and its experiences with other employers, organisations and municipalities. That has inspired other employers in the Netherlands to start their own traineeships for this group.

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. NS is prioritising informal learning and learning on the job, with the aim of accelerating the application of new knowledge and skills. NS has invested over €35 million in training courses and other educational activities. 14,386 staff (excluding Retail) attended classic training days and 21,972 employees took e-learning modules via the NS Learning Centre (*Leercentrum*). Moreover, 175 training programmes were created or improved.

Focus on professional expertise

The professional skills of our drivers, chief guards, service employees, safety staff and mechanics remain at the heart of all our learning activities. A new training module was developed for drivers and chief guards to help them evacuate tunnels even more effectively. Furthermore, we purchased new train simulators to improve the performance of the Intercity direct. Around 200 work placements were made available by NS in 2017 for students on the vocational Rail Transport Driver training programme.

Rolling stock technology and maintenance

In 2017, the training for preventive maintenance of the FLIRT trains came to an end. Staff at the maintenance centres in Maastricht and Leidschendam and the service centres can carry out maintenance and checks. What is more, the train supplier CAF and the NS Learning Centre have jointly developed their first training courses for preventive maintenance.

TechniekFabriek

TechniekFabriek ('technology factory'), in which NS provides technological training in the form of an intensive vocational programme for current and future train mechanics, celebrated its fifth anniversary. In 2017, 96 trainees were taking a two-year apprenticeship in Mechatronics. In September, 33 trainees moved on to a job at NS. In addition, 253 current mechanics took part in a multi-year vocational training programme in 2017. The programmes are tailored to tie in with the mechanics' work experience, which means they can complete the course relatively quickly. In 2017, 101 participants received a certificate, recognition of equivalence or exemption.

Integrity

NS is running an intensive programme to raise awareness about integrity. One aspect of that is a package of tools, information and working methods. Teams can use this in a dialogue to work on their own integrity, thinking more about the choices they make, limiting risks and improving cooperation. Three new e-learning modules were developed to support this. The module for the NS Code of Conduct was revised.

Journey information

In 2017, over 100 journey information staff were trained for the new role of central journey information analyst, which merges the tasks of the journey information employee and the national journey information officer. They started working for the new Operational Journey Information Centre, which is improving the quality of journey information.

Other

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 or workplace assignments. We also make use of the in-house expertise of colleagues. Last year, our own NS employees with a talent for individual or team coaching, peer assistance or facilitation assisted in more than 170 coaching projects, helped 20 teams and worked with more than 80 teams on team development. There are various courses available for all employees via the NS learning portal, which gives them online access to a large assortment: a total of 2,251 training courses are available for staff.

Mobility

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 2017, the vast majority of the employees who participated found new suitable jobs within the period of assistance.

NS not only assists staff in reintegration, redundancy and outplacement, it also explicitly works on promoting employability. In 2017, 604 employees made use of the help and advice offered by the Careers Advice department at their own initiative. A total of 929 employees received assistance. All 100 career vouchers that were made available at the end of 2016 were cashed in; the number of requests exceeded the number on offer.

Leadership at NS

Managers in crucial positions in NS need to be effective and flexible if they are to be able to improve its performance. Managers in the operational departments play a key role. They can make sure that staff are noticed, listened to and helped so that they in turn can fulfil customers' needs and meet the promises NS has made. We are therefore investing specifically in this group of managers, both in improving their performance and in their personal development. We are also working on promoting the current leaders and preparing the future leaders. We have a clear idea of the successors in both the longer and the shorter term for the 186 key positions. In 2017, 82% of appointments to key positions were from the internal succession planning.

Leadership development

We offer customised support and in-company leadership programmes to help staff with promotion potential make their next career move. The third edition of the Navigator leadership programme started in 2017: 14 participants earmarked for top-fifty positions in the company are receiving support in developing their leadership skills. The CAP programme has also started. In this programme, 20 candidates for senior management positions help define the next steps they need to make as a leader.

In 2017, 69 trainees took part in the trainee programmes for operational management, IT, procurement, technology and finance. Of the cohort that took part in 2016, 40% have now been promoted to more senior jobs. Internal studies over the past year show that personal development and sponsoring by the organisation are important factors determining career success among trainees.

The new curriculum for managers in NS Operatie became available at the start of 2017. We have introduced this new curriculum in order to bolster the management skills of our front-line managers.

A new collective labour agreement

NS and the trade unions (FNV, VVMC, VHS and CNV) concluded a new collective labour agreement in 2017 for the period 2017 to 2020. NS thinks it is important that employees get the best out of themselves and are able to work in a healthy and motivated way. Solid agreements were made with the unions on these topics in the collective labour agreement:

Individual budget

All NS employees will receive an individual budget totalling 750 euros for three years. They can use this money for facilities and activities that fit their personal wishes in the field of health and motivation at work. This could for instance be the fees for gym membership or a training course.

Mobility

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

Part-time retirement scheme

A part-time retirement scheme will give older employees the possibility as of 1 January 2020 of gradually moving on to retirement by systematically reducing the working week. In this scheme, they will work for 28 hours, be paid for 32 and accrue pension as if they worked 36. This will be possible from five years before the state pension age. This scheme is financially more attractive than the current schemes for older staff and it gives employees more free time. The current schemes for older staff will continue to operate.

Employee participation

For the employee participation bodies, 2017 was all about the choices NS made in its strategy. The employee participation bodies at NS had an important role in coming up with ideas and advice on the implementation of these choices. An important change was the new setup for direct reporting lines to the Executive Board, which should help improve operational and financial performance at NS. The decision on this new setup for the main organisational structure also led to a change in the employee participation structure at NS. As a consequence, procedural agreements were made with the employee participation bodies in order to obtain an appropriate employee participation structure. Systematic agreements were made with the Central Works Council this year about its involvement in the operations abroad of the subsidiary Abellio. These agreements will be documented in a covenant, which will safeguard cooperation in the future in this regard.

Staff engagement

The staff engagement survey is held every two years at NS; the last one was in 2016. In 2017, managers used brief engagement surveys that can be deployed to measure employees' engagement and needs in between the large-scale surveys. We will be using this instrument more often in the years ahead in order to obtain up-to-date information.

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, based on trust, we are able to jointly seize opportunities and accept or mitigate risks at an early stage. These contacts often lead to our stakeholders providing 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 from the public and elsewhere – passengers, media, politicians and other stakeholders. The ongoing dialogue with the parties around us 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 our 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 relations with some stakeholders is determined 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 once every two years. The results are then presented to the Executive Board. This consultation took place again in 2017.

Stakeholder management

NS is continually talking to the main stakeholders: organisations representing passengers and consumers, ProRail, provinces, municipalities, franchise authorities, the shareholder, staff, the unions, other carriers, politicians, employee participation bodies, suppliers, non-governmental organisations 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 our services and 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 from stakeholders

Various stakeholders paid us 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 the High-Speed Line (HSL) and travelled on the IC 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 upgrade 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.

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 items such as cooperative projects, services and performance. In the national public transport users' forum LOCOV, NS regularly has discussions with broadly represented passengers' and consumers' organisations. This legally defined forum consists of 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 changing a decision. We bring participating organisations on board such as ROVER, Ieder(in), the KBO union of senior citizens' organisations and the ANWB for 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 2017, NS and LOCOV talked to representatives of civil society organisations, scientists and other stakeholders on solutions for reducing crowding during peak periods: what trends and developments do we see for the years ahead on our roads and in public transport? What solutions are there for providing comfortable journeys during peak periods? Studies and trials are also carried out. For instance, last autumn NS tested whether extending the use of discount travel could help achieve a better spread of demand during peak periods. NS uses the outcomes in its decision-making.

Regarding the accessibility of travelling by train, NS had regular contacts in 2017 with LOCOV, the Eye Association and the interest group Ieder(in). Topics discussed included the accessibility of the Intercity New Generation (ICNG) and the introduction of journey information about accessibility when travelling. NS's proposal to provide assistance at all stations where NS stops (and where the platform allows it) was discussed a number of times in the LOCOV forum.

Mobility Alliance

NS, ANWB (the Dutch automobile association), RAI 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.

Some of these were incorporated in the coalition agreement for the Rutte III cabinet, such as additional money for infrastructure and public transport under this government and pilot projects for alternative forms of transport and payment. The coalition government is also focusing on a more integrated and sustainable transport system in which the separate elements fit seamlessly together. In the past year, the Mobility Alliance organised various meetings with politicians, civil servants and administrative partners of provincial authorities, municipalities and metropolitan regions to put the growing problems with accessibility on the agenda and at the same time identify and facilitate opportunities and solutions. During a working dinner in November, the alliance offered to act as a dialogue partner and sparring partner for the government and administrative partners in the coming period in order to jointly implement concrete measures and plans.

Masterclass: First-class Railway Knowledge

Civil servants and other administrators in municipalities, provinces and urban regions regularly ask NS (via its regional boards) questions about the 'railway world'. Who takes the decision that a lift should be put in place 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 the regional management of NS and ProRail jointly organise *First-class Railway Knowledge* twice a year. This is a masterclass, usually for a group of 50 to 70 participants, in which we share our knowledge and give civil servants a better understanding of various aspects of the railway system (which can be rather technical). In 2017 we organised masterclasses on track capacity and on the railway of the future.

Dilemmas in the discussions

Informing stakeholders about dilemmas in good time is how NS seeks to provide insights into policy considerations and find joint solutions. We provide our stakeholders with a steady stream of feedback about their ideas and recommendations and the effect that the dialogue has on NS policy, both in the regular discussions and in reports. For example, when drawing up a new timetable we have to make a great many choices. 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.

The 2018 timetable primarily incorporates a number of changes to the Amsterdam-Eindhoven corridor. That was the result of increasing the frequency of Intercity trains from four to six an hour, and increasing the number of Sprinter trains from four to six an hour in the broadly-defined peak period for the route between Utrecht Centraal and Houten Castellum. Those changes also had consequences for the timetable in the provinces of Noord-Holland, Noord-Brabant and Limburg.

NS has not been able to improve the timetable for all passengers. For example, some passengers in Hoorn now have a longer changeover because of the changes to the trains between Amsterdam and Eindhoven. NS gave a clear picture of the consequences and discussed them at an early stage, investigating several alternatives proposed by consumer organisations and local authorities for reducing the changeover time in Hoorn. All these alternatives had to be rejected because the infrastructure did not allow them or because they had adverse effects on a larger number of passengers. NS therefore decided to run several extra trains at the start and finish of the peak periods to reduce the numbers of passengers with longer changeover times. NS also discussed adjustment measures in the event of disruption between Amsterdam and Eindhoven in the LOCOV forum, which resulted in a better service for Sprinter stations during disruptions.

NS conducted trials every Wednesday last autumn with a high-frequency Intercity service between Amsterdam and Eindhoven. Before the trials started, the consumer organisations were critical of the experiment. In their advice regarding the timetable changes for September, they stated, "We think that the effects of this trial are such that you will be making excessive demands on the adaptability and flexibility of those customers." Prior to and during the trials, NS informed the consumer organisations of the objectives and results of the test.

This year too, passengers were able to submit questions to the developers of the 2018 timetable via the online forum. Some passengers were more understanding after they heard in these conversations that NS could not find a better solution for some problems. After comments from passengers on the forum, an error in the timetable could be rectified in time: the connection at Zaandam station for the earliest train from Alkmaar to Schiphol had inadvertently no longer been available. We also made several corrections to the journey information in plenty of time before the new timetable came into effect.

Regional case: buses between Zwolle and Kampen

For three months in the summer of 2017, there was a replacement bus service instead of the train service between Zwolle and Kampen because of major engineering work. In the spring of 2017, the passenger organisation ROCOV Overijssel, the province of Overijssel and NS discussed the replacement bus service. ROCOV's recommendations concerned such matters as the spot where the buses departed, informing passengers and the option of temporarily changing season tickets from Kampen station to Kampen-Zuid. That helped NS deliver a more tailored solution for our passengers. During the first week of engineering work, representatives from ROCOV, the province and NS travelled on the bus back and forth between Zwolle and Kampen. That resulted in concrete improvements for passengers, such as the placement of an additional mobile check-in unit at Kampen station.

Regional case: completing the Accessible Schiphol public transport programme

As one of the initiators, NS took part in the Accessible Schiphol public transport programme from 2015 to mid-2017. In partnership with Schiphol, ProRail, the Ministry of Infrastructure and Water Management, Amsterdam Transport Region and the municipality of Amsterdam, a cohesive package of measures large and small were introduced over a two-year period to improve access by public transport to Schiphol airport. The measures varied from investments in expanding the capacity of descending and ascending points and reducing train cancellations, through to better journey information on platforms and changes to the tunnel safety regime, which has led to a reduction in the number of major disruptions in the Schiphol Tunnel. The programme included performance monitoring at Schiphol and a number of work conferences with staff from all the parties involved. The programme ended in 2017 as its objectives had been achieved. We are still collaborating with the other partners as part of our regular operations.

Consultation with trade unions

NS attaches great importance to good relations with the trade unions. In mid-June, FNV Spoor went on strike at locations including Arnhem, Nijmegen, The Hague and Zwolle. There was also a spontaneous strike by staff at Amsterdam Centraal station in early July. In consultations between NS and the trade unions CNV, FNV Spoor, VVMC and VHS, an initiative was taken to develop a joint long-term agenda aimed at keeping NS strong. We announced that agenda at the end of July. Its elements include:

- Pursuing a sustainable social policy in the short and long term, facilitating staff to the maximum degree possible in reaching the end of their working lives in good health, including investigating the feasibility of an early retirement scheme. This has also been incorporated in the new collective labour agreement.
- The role of NS in passengers' door-to-door journeys.
- Innovation, the use of new technology and the impact this has on employees' day-to-day work.
- Strengthening the position of NS where possible in the various regions.

Stakeholder dialogues

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 between the stakeholders themselves. This regularly leads to a better understanding of one another's interests and valuable constructive criticism and ideas for NS.

In September 2017, a stakeholders' dialogue took place in which a variety of stakeholders discussed the future of NS with one another. This showed that there was a demand for a further extension of NS's door-to-door strategy. The stakeholders taking part also felt NS could play an even more prominent role in sustainable mobility.

The theme of sustainable mobility was also taken a step further this year in dialogue with the coalition partners of *Anders Reizen* ('Travelling differently'), 40 companies with the common goal of improving the CO₂ footprint of their own mobility. In 2017, NS and its staff went on a sustainable excursion and took a sustainable ideas workshop. This resulted in over 100 ideas for a more sustainable NS.

"We complimented NS and ProRail on the good preparation and execution. We have however seen that when a disruption leads to fewer trains, the Sprinter trains get lower priority than the Intercity trains. That is a choice NS and ProRail have made in order to still be able to transport as many passengers as possible by train. At our insistence, the companies have now changed their adjustment measures in the event of disruption so that Sprinter passengers are not entirely abandoned."

Passengers' organisation Rover on the ten-minute service

"By collaborating as partners at Schiphol, it was possible to achieve improvements jointly for passengers. A good example is the creation of the multimodal tourist ticket and its joint sale and promotion at Schiphol."

Nico van Paridon, Public Transport manager, Amsterdam Transport Region

"Transport and Logistics Netherlands (TLN) set up the Mobility Alliance in 2016 in partnership with NS, ANWB and the RAI Association. Now the alliance consists of 25 mobility organisations, ranging from representatives of public transport and passengers to automobiles and freight transport. In the past year, the Mobility Alliance has lobbied hard for a key position in the new coalition agreement for integrated and sustainable mobility, in which it has largely been successful. NS played an important part in this, which shows leadership. But we still have a way to go. What matters now is for NS, TLN and the others to implement the measures and remain the dialogue partner for politicians and the government in the task of keeping the Netherlands accessible and habitable."

Arthur Van Dijk, TLN chair

//

During my expedition to Spitsbergen, the senior managers, including those from NS, were appalled at how fast the Arctic is changing. Then we all came up with measures to combat climate change. Cooperation is key and NS has done a great deal to help extend the 'Anders Reizen' coalition to its current membership of 40 companies. In it, they agree on how to promote cycling, public transport and electric cars, for instance. Incidentally, I like travelling by train when in the Netherlands. It's sustainable and I can use my time profitably. It's important to have far more people doing this.

Bernice Notenboom, Arctic explorer, climate journalist and film maker

//

Overview of stakeholder dialogues

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.

Content of dialogue		Effects of the dialogue on NS policy
European		
EU institutions, CER, UIC, ERA	15	Strengthening the position of passengers and representing NS's position as the key rail passenger carrier in the Netherlands.
	Implementation of the Fourth EU Railway Package, enhancing interoperability, ERTMS, accessibility, improving the passenger's position, promoting sustainable mobility	
National (NL)		
Customers (consumers and businesses)	2, 3, 6, 11	Improved services, including: <ul style="list-style-type: none"> • Introduction of mobile ticketing in Journey Planner Xtra (using smartphones to purchase train tickets and travel) • NS Extra registration also possible for the corporate market Extension of number of customer discounts. • First test with a group of passengers of NS Flex, travelling on account (i.e. retrospective payment) for consumers • Improvement of online purchasing of train tickets and the NS Business Card • More peak routes added to the MyOV peak spread app • Reintroduction of Zomertoer ticket • Better alignment between content of newsletters and website and wishes of users • Arranging OV-fiets and storage facilities made possible when purchasing season ticket • <i>WeekendVrij</i> and <i>DalVrij</i> season tickets for first class and 65+ reduced in price as of 1-Jan-2018 • Missed checkout service for Business Card and the possibility of adding a weekend product for private use • Extension of propositions for tourists with an Amsterdam Region One-Day Travel Ticket
Shareholder Ministry of Finance	1, 2, 7, 13, 14, 15	<ul style="list-style-type: none"> • Determining financial policy and the Executive Board's remuneration • Transparent reporting as per GRI • Progress in GRC measures • Progress in the <i>Spoorslags Beter</i> strategy • Foreign operations
	Performance of NS, remuneration, strategy, appointments, major investments, norm for returns from State participations	
Ministry of Infrastructure and Water Management	1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12	These include:

	NS performance, main rail network franchise, reliability, transport capacity, the door-to-door journey, HSL South train services, personal safety and railway safety, public transport smartcard, accessibility, timetable, transparency	<ul style="list-style-type: none"> • Transport Plan 2017 • Timetable for 2018 and 2019 • Product step for HSL South The Hague-Eindhoven via the HSL and expenditure of the fines for IC direct. • High-frequency service: ten-minute trains between Amsterdam and Eindhoven • Package of personal safety measures and High Impact Crime approach with Ministry of Justice and Security <ul style="list-style-type: none"> - Extension of the times during which assistance is available. All stations with a limited assistance service will get a comprehensive assistance service. - Pilot for single check-in/out system for the Valleilijn route. - Administrative agreement on bicycle parking: extension of the number of storage facilities that are free for the first 24 hours.
National political bodies	1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16	<p>These include:</p> <ul style="list-style-type: none"> • Dialogue on avoiding peak hours • Public transport gates coming into operation • Accessibility Programme • Transparency and a level playing field • Package of measures for personal safety
Supervisory authorities – ACM, IL&T, Personal Data Authority	1, 2, 4, 7, 9, 10, 11, 12, 13	<ul style="list-style-type: none"> • Improved implementation and service <ul style="list-style-type: none"> - Promoting compliance • Transparency • Position statements • Improving safety on the tracks
ProRail	1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12	<p>These include:</p> <ul style="list-style-type: none"> • Realisation of <i>Better & More</i> • 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)	1, 2, 3, 6, 7, 8, 9, 10, 11, 12	<p>These include:</p> <ul style="list-style-type: none"> • A better train product by processing timetable suggestions made by consumer organisations

	NS timetable, tackling crowded trains, fares, journey information, public transport smartcard, services for passengers, transport plan, customer satisfaction figures, punctuality, new rolling stock, cooperation, service interruptions, accessibility, international connections, boarding zones, HSL services, NS strategy, M-lab innovations, new journey planner, fares.	<ul style="list-style-type: none"> • Changes to the choices regarding journey information and starting the process for developing a broadly supported vision of journey information resources • Improvements in sales and service channels.
Interest groups and NGOs (including employers)	2, 5, 11, 16 Encouraging sustainable mobility (via employers), contributing to the SER energy agreement, social policy, CSR, sustainability ambitions, making replacement bus service more sustainable, contribution by NS to the Sustainable Development Goals.	<ul style="list-style-type: none"> • Making NS's own mobility policy more sustainable • Large employers implementing and extending the Sustainable Mobility Pledge to arrive at a set of measures with the most impact • Contribution to Spring Tide – <i>Anders Reizen</i> • Refining impact calculations for better investment decisions • Selection of SDG goals for 2030 • Sustainability specifications in invitation to tender for replacement bus service
Unions	4, 12, 16 Collective labour agreement, personal safety, pension plan, social plan, personal and social consequences of organisational changes, signs suggesting satisfaction or dissatisfaction among staff, employees' interests, long-term NS strategy.	<ul style="list-style-type: none"> • Implementation of the agreements in the collective labour agreement for 2015-2017 and the HR policy pursuant to them • Implementation of the Social Plan • Implementation of the pension plan • Implementation of a packet of measures for personal safety and the decision to implement them • Concluding the collective labour agreement for 2017-2020
Suppliers	1, 2, 4, 5, 7, 11, 13 Sustainability, transparency, financial position, integrity, innovation, reliability, risk management, cooperation	<ul style="list-style-type: none"> • Achievement of CSR objectives (by making the 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 (IT and maintenance) • More attention for compliance regarding observance of legislation and regulations • Cooperation and innovation together with partners.
Media	All NS-related subjects	<ul style="list-style-type: none"> • Position statements • Improved picture of NS in line with operational performance
Regions (regional authorities and official representatives of the provinces, metropolitan regions and municipalities)	1, 2, 3, 4, 6, 7, 8, 9, 10, 12 Quality of train services, busy trains, punctuality,	<p>These include:</p> <ul style="list-style-type: none"> • New and more modern stations and redevelopment of station surroundings. • Expansion of night-time services

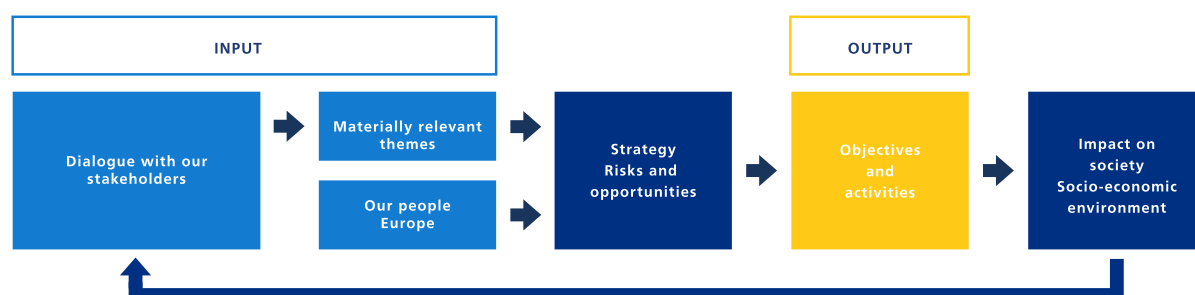
development and redevelopment of existing stations, *Spoortafel* discussion bodies, picture of the future of public transport and the Public Transport Development Agenda, timetable, cross-border transport, access gates, personal safety and railway safety, transport sector-wide agreements, regional franchises, noise nuisance near the railways, hub development.

- Agreement about the positioning and accelerated rollout of access gates
- Replacement bus transport in the event of train services being disrupted
- Collective and regional objectives and Public Transport Development Agendas
- Customisation in the main rail network timetable and connections to regional public transport
- Optimisation study for the Amsterdam-Schiphol route
- MIRT multimodal hub at Schiphol on the investment agenda in conjunction with the Greater Amsterdam timetable
- Various storage facilities free of charge for first 24 hours, extension of P+R
- Noise nuisance: complaints procedure via Customer Service, deployment of quieter rolling stock

Internal: central and local Works Councils, vocational training

See chapter on 'NS as an employer'

From dialogue to impact



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: the materially relevant themes. 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.

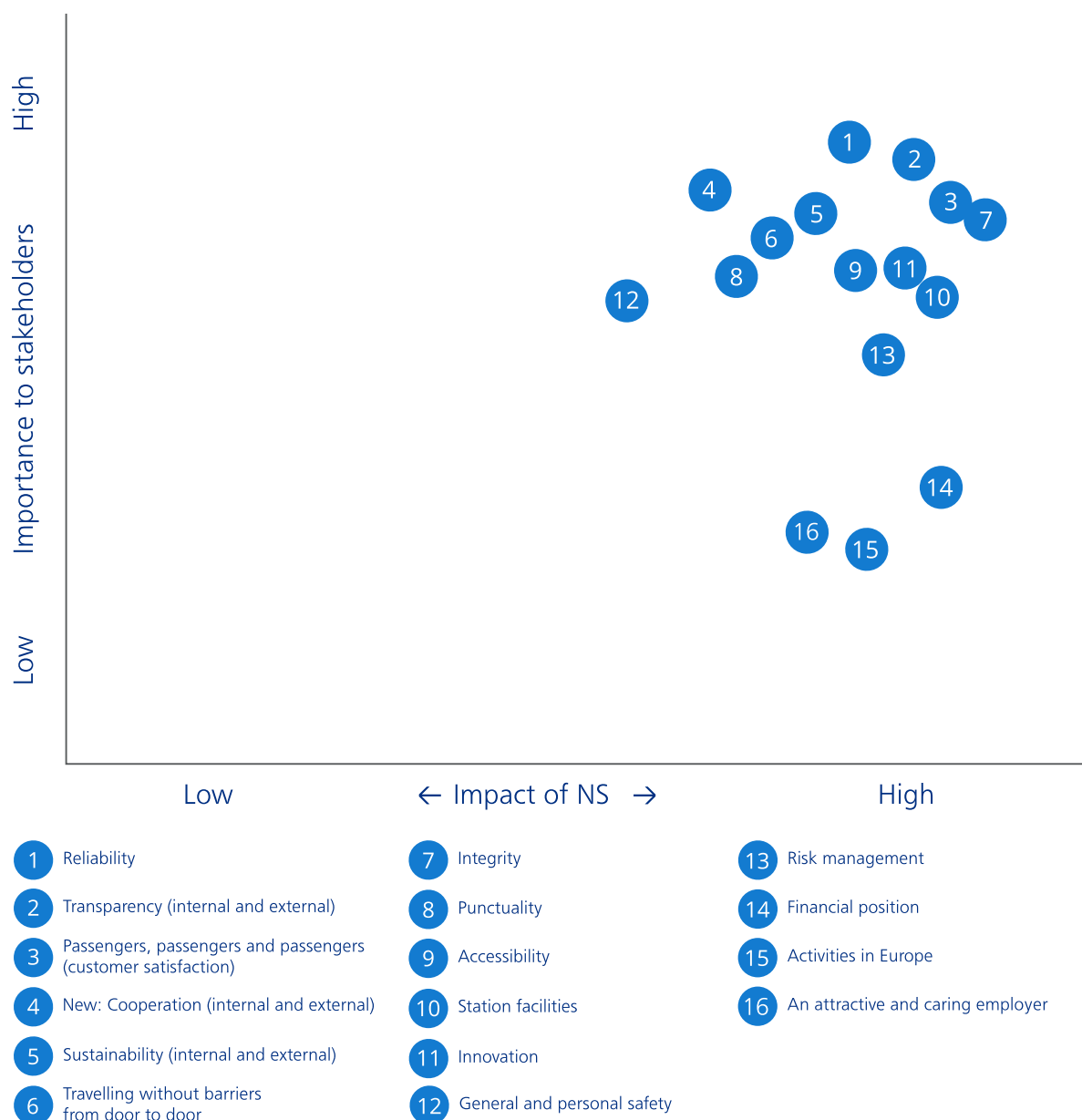
Material relevance matrix 2017

NS assessed the materially relevant themes for 2017 to check that they were up to date and valid when compared with 2016. The position of the themes was confirmed in additional checks: a biennial survey among stakeholders (held for the second time this year), continuous monitoring, media and Internet analysis and regular meetings with stakeholders. Furthermore, internal sector experts looked at developments within the public transport sector. The matrix for 2017 was then presented to the Executive Board and finalised.

Compared with last year, many materially relevant themes are closer together in terms of the importance that stakeholders attach to them. Service aspects (facilities at stations, passengers as the top priority and seamless door-to-door journeys) are now rated as slightly less important by stakeholders. The theme of collaboration (internally and externally) has been added as

stakeholders indicated in the biennial survey that they had seen improvements in this area but still considered this theme to be important. The most materially relevant themes are numbers 1 through 11. Stakeholders attach less importance to personal safety (12), risk management (13), the financial position (14), the operations in Europe (15) and NS as an attractive and caring employer (16), but give similar scores for these themes as in previous years.

Material relevance matrix 2017



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 six SDGs.



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 direction of third parties, adaptation and raising awareness
- A decent employer: equality, diversity and inclusiveness, getting young people into work

NS is consulting with 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. In 2018, NS will continue the dialogue on the strategy formulation and we will also set KPIs and targets. Previously set targets 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.

Strategy and materially relevant themes

The table below shows the connection between our strategy and the materially relevant themes and associated KPIs. We have also linked them to the risks we have identified. NS has not determined any KPIs or risks for the materially relevant theme of innovation.

1. Strategic priorities	2. Indicators with a quantitative target value	3. Objectives	4. Results	5. Risk factors	6. (Profit/prospects)
Themes/ materially relevant items	KPI	Objective for 2017	Achieved in 2017	Risks	Social impact/ trend
An attractive physical offering					
Punctuality / reliability	Punctuality			Market regulation, infrastructure capacity, IT reliability,	Journey time
	% punctuality for passengers to 5 min, main rail network	89.2%	91.6%		
	Quality of connections with other carriers	93.7%	94.5%		
Accessibility / reliability	Accessibility				Journey time
	Seat availability at peak times	94.3%	95.1%		
	Seat availability at peak times on routes needing attention	4.9%	2.4%		
Optimising the customer experience					
Customer satisfaction	Customer experience			Market regulation	Mobility
	General customer satisfaction	74%	80%		
Safety (including personal safety)	Personal safety			Safety	Personal safety
	Passengers’ perception of safety	81%	88%		
	Reputation (RepTrak)	60 in 2020	58.8		
Performance of HSL South					
Passengers, passengers and passengers / customer satisfaction	Customer experience			HSL service	Mobility
	General customer satisfaction with HSL South	68%	77%		
Punctuality / reliability	Punctuality			HSL service	Journey time
	% punctuality for passengers on HSL South	82.5%	83.5%		
Accessibility / reliability	Accessibility			HSL service	
	Chance of getting a seat on HSL South	91.2%	96.8%		

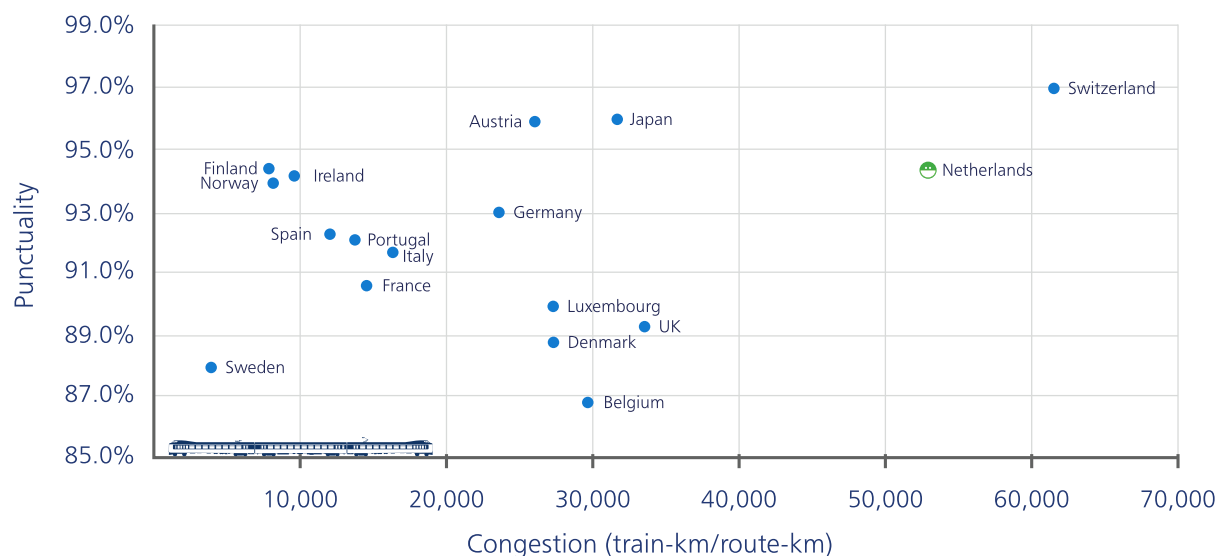
1. Strategic priorities	2. Indicators with a quantitative target value	3. Objectives	4. Results	5. Risk factors	6. (Profit/prospects)
Themes/ materially relevant items	KPI	Objective for 2017	Achieved in 2017	Risks	Social impact/ trend
Perfect execution					
Passengers, passengers and passengers / customer satisfaction	Punctuality			Market regulation, infrastructure capacity, IT reliability,	Journey time
	% punctuality for passengers to 15 min, main rail network	96.7%	97.4%		
	Journey information			IT reliability	Journey time
	Information during disruptions	75.0%	83.2%		
	Customer satisfaction with journey information in the travel chain	78.0%	86.3%		
World-class stations					
Station facilities	The station experience				
	Customer satisfaction with stations	68.0%	73%		
Safe and sustainable travel					
Sustainability	Sustainable operations				Environment
	Perception of NS as a sustainable company	top 10 by 2020	12		
	Energy efficiency of traction	72%	74%		
	Waste separation	80% reuse by 2020	41.8%		
Transparency	Transparency			Non-compliance	
	Position in the Transparency Benchmark	top 10	6		
Safety	Railway safety			Safety	
	Number of SPADs (in NL)	51	47		
Abellio					
Activities in Europe	no KPI available for this	n/a	n/a		
NS as an employer					
An attractive and caring employer	Staff			Safety	training
	Employee engagement	none	none		
	Staff with occupational disabilities	200 before 2018	74		
	Women in senior management	none	40%		
	TRR	--	5.0		occupational safety
	Sickness absence	5.1%	5.7%		

1. Strategic priorities	2. Indicators with a quantitative target value	3. Objectives	4. Results	5. Risk factors	6. (Profit/prospects)
Themes/ materially relevant items	KPI	Objective for 2017	Achieved in 2017	Risks	Social impact/ trend
Risk management					
Risk management	Risk management				
	Management of significant risks	Four reports a year	100%		
Finances					
Financial position	Financial position			Inadequate operating results, NS investments abroad	expenditure
	Revenue (amounts in €M)		5,121		
	ROE		0.7%		
	Investment (amounts in €M)		618		

Our performance in a wider context

Punctuality in a busy railway network

A comparison between punctuality and track occupancy in eighteen countries shows that NS is one of the top three. The Netherlands has shared the top spot for many years now with Switzerland and Japan, both of which also achieve a high level 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.

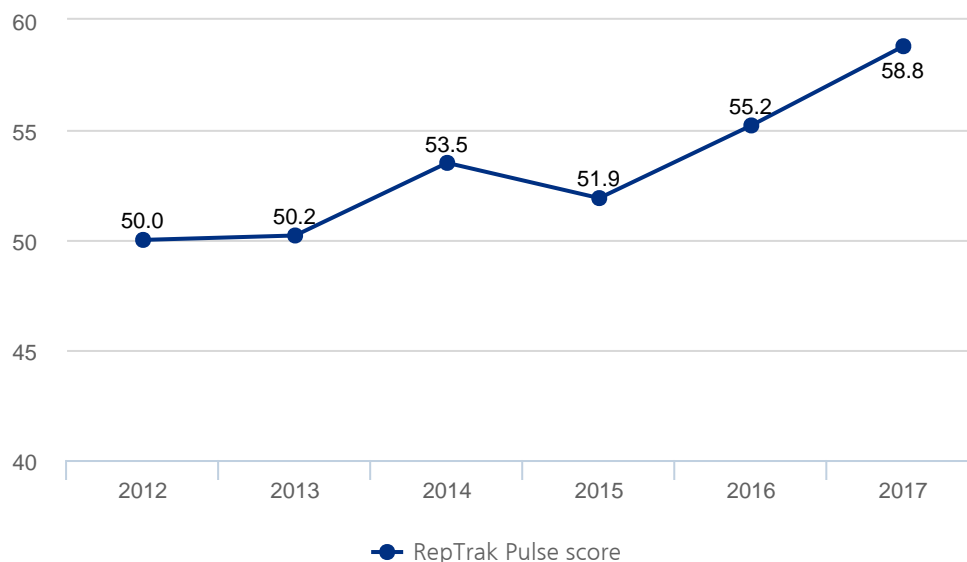
Benchmark

In comparison with many other European countries, Dutch rail passengers travel in newer trains that are more frequent and are more likely to be on time. Passengers pay fares for their train tickets that are around the average for the countries in the comparison (+4%). Furthermore, the amount of tax money invested in the railways in the Netherlands is relatively low. Even so, NS receives more complaints per passenger than carriers in other countries. These findings come from the international benchmark that NS and ProRail arranged to be carried out. In this benchmark, the performance on the Dutch railway network in the period 2011-2015 was compared with seven other carriers in Belgium, Denmark, the United Kingdom and Switzerland.

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 reputation of NS weakened in the period 2010-2012. This fall was caused, among other things, by the performance of the railways in three successive winter periods, the tragic train accident in Amsterdam in 2012 and the developments around Fyra/V250. In 2014, the measurement of NS's reputation rose to an average annual score of 53.5 (on a scale of 100). This positive development did not continue in 2015. The reputation score fell to 51.9. This was partly due to one or two major disruptions, the attention given to aggression against NS staff, the irregularities in the tender in Limburg and the parliamentary inquiry into Fyra. In 2016, an improvement was seen (55.2), which was sustained in 2017 with an average score of 58.8. That score is above the target for 2017. The improvement was in part the result of greater punctuality for passengers and fewer cancellations, which meant a more reliable product for passengers. The media attention paid to NS was comparable to the year before. The positive development in our reputation is also reflected in the development in customer satisfaction. Our target is a reputation score of 60 by 2020.

Development NS RepTrak pulse score



More sustainable image for NS

As of 2017, all our electric trains run on wind power. That is one reason why NS is a trendsetter in sustainable mobility. Thanks to our sustainability efforts, we have been able to make it clearer to Dutch consumers that NS is the leading sustainable option if they want to travel anywhere. The 2017 *Dossier Duurzaam* sustainability survey shows that NS is the only company in the top 20 whose sustainability reputation has improved. Indeed, NS had the most sustainable image this year in the transport sector.

Dossier Duurzaam also shows an upward trend in the attention consumers are paying to sustainability. Companies are lagging behind the expectations of consumers. Almost three quarters of respondents think it is important for companies to operate sustainably but only one in five consumers think that companies make a positive contribution to the world. NS ended 12th in the list of major brands (17th in 2016).

Emissions

27% of direct CO₂ emissions in the Netherlands are caused by the transport sector (source: CE Delft). CO₂ emissions from the railways have decreased in recent years, whereas those from the transport sector as a whole have increased substantially. Emissions lead to global warming. At the Climate Change Conference in Paris in November 2015, countries agreed to stay below an increase in temperature of 2 degrees Celsius. NS is contributing to this with its verified objectives for saving energy and becoming greener. As a result of these measures we have seen a considerable reduction in CO₂ emissions by NS in the Netherlands over the last five years. Travelling by train is better for the environment than many other forms of motorised transport, given that the CO₂ emissions per passenger-kilometre are virtually zero. In terms of energy consumption, in 2017 NS was a good 35% below the European average of the UIC international railway norm of 0.11 kWh per passenger-kilometre.

Sustainable mobility

Over 50% of car-kilometres in the Netherlands are facilitated by employers. As a consequence, employers are a key factor in reducing CO₂ emissions due to mobility. At the initiative of the employers' organisation VNO NCW, the Ministry of Infrastructure and Water Management, Nature and the Environment and NS, fifteen organisations joined forces in 2015 to encourage sustainable mobility among their employees. They formed the group *Anders Reizen* (andersreizen.nu). In 2017, this group grew to 40 participating companies representing 290,000 employees in the Netherlands.

The organisations met up several times in 2017 to learn from their successes and bottlenecks. Based on the best practices, a list of the top eight measures with the most impact was drawn up for reducing CO₂ emissions caused by work-related mobility. Supra-company factors inhibiting more sustainable mobility, such as tax issues and employee benefits, are to be discussed in central workgroups.

Sustainable procurement

NS purchases over €1 billion of goods and services annually. 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 Purchasing Conditions (www.nsprocurement.nl). We also work closely with market players and challenge them to submit innovative and sustainable offers. We are using the following initiatives to carry out our steering role:

- **Supplier assessments**

Since 2014 we have been carrying out Corporate Social Responsibility (CSR) assessments at our biggest suppliers, looking to see 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. 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' purchasing (i.e. looking at recycling etc.)**

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 uses Socially Responsible Procurement (SRP) for describing the selection and award criteria. For example, a sustainability meeting takes place once a quarter for work clothing in which all the options relating to workwear are discussed and investigated for their feasibility. We have also drawn up a list of priorities with attainable objectives in the field of sustainability, such as a 'circular economy' stand-by team jacket and a new returns process.

- **Code of conduct for suppliers with the biggest spend**

The code of conduct has become part of the contract for new suppliers. 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. 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. For example, the work clothing supplier makes its subcontractors sign a Code of Conduct for Working Conditions. This code focuses on the human rights of employees. Aspects such as the safety, health, wages and working hours of employees are thus safeguarded.

NS subscribes to the code of conduct drawn up by NEVI, the Dutch association for purchasing management, which provides guidelines for acting ethically and for fair business practices (Guide to responsible procurement, NEVI 2012). NS has drawn up a policy to prevent bribery and corruption. As part of the implementation, all purchasers within NS are taking an e-learning module on Ethics & Compliance, and attention is being paid to the importance of the proper observance of the policy.

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. A score of 195 points out of 200 put NS in sixth place on the 2017 Transparency Ladder (2016: third). Our ambition is to stay in the top 10.

Scope and reporting criteria



NS reports in line with the 'core option' of the GRI standards. The GRI guidelines are the most widely accepted guidelines worldwide for preparing non-financial annual reports. The guidelines themselves can be found at www.globalreporting.org.

NS commissioned EY to provide the external assurance for the report. The sustainability information consists of the following chapters: In brief, 2017 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, Dialogue with our stakeholders, Our materially relevant themes and Scope and reporting criteria in the NS annual report. NS feels that external assurance is important because it generates more certainty about the reliability of the information given.

Combined report

In the NS 2017 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 choice has been made deliberately. NS is at the heart of the community. Passenger transport by train and the commercial operation of stations and their surroundings are intrinsically important to society. Other social aspects, such as care for the natural and social environment, are thus also an integral component of the business operations of NS.

GRI indicators

The selection of the indicators is based on the GRI method, the Transport Plan 2017, the discussions with our stakeholders and the material relevance matrix derived from them. 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 of these can be found on www.ns.nl/mvoberekeningen and the definition cards for the performance indicators in the Transport Plan 2017.

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 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 Dutch dialogue with stakeholders.

The report covers the 2017 financial year, which ran from 1 January 2017 to 31 December 2017. 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 from 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 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 transport 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 does occur, this is explained. Acquisitions are included in the data from the date of acquisition; disinvestments are listed 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 2017

(in millions of euros)

	2017	2016
1 Revenue	5,121	5,093
2 Personnel expenses	2,056	2,039
3 Depreciation, amortisation and impairments	369	345
4 Use of raw materials, consumables and inventories	505	508
5 Own capitalised production	-161	-128
6 Subcontracted work and other external costs	475	481
7 Infrastructure and concession fees	930	861
8 Other operating expenses	933	859
Total operating expenses	5,107	4,965
15 Share in result of investees recognised using the equity method	18	142
Result from operating activities	32	270
Finance income	16	22
Finance expenses	-21	-31
27 Net finance result	-5	-9
Result before income tax	27	261
9 Income tax	-2	-49
Result for the period	25	212
Attributable to:		
Shareholder of the company	24	212
Minority interests	1	-
Result for the period	25	212

Consolidated statement of comprehensive income for 2017

(in millions of euros)

	2017	2016
Result for the period	25	212
Other comprehensive income items that are or may be classified to profit and loss		
Currency translation differences on foreign activities	-3	-19
Effective portion of changes in fair value of cash flow hedges	3	46
Income tax	-	-10
Effective portion of changes in fair value of cash flow hedges as a consequence of revaluation of investments in equity accounted investees after income tax	-	2
	-	19
Other comprehensive income items that never be reclassified to profit and loss		
Actuarial result for defined benefit plans (see note 29)	21	13
Income tax	-2	-1
Actuarial result for defined benefit plans as a consequence of revaluation of investments in equity accounted investees, after income tax (see note 15)	2	1
	21	13
Other comprehensive income recognised in equity	46	244
Attributable to:		
Shareholder of the company	45	244
Minority interest	1	-
Total comprehensive income	46	244

Consolidated statement of financial position as at 31 December 2017

before profit appropriation

(in millions of euros)		December 31, 2017	December 31, 2016
Assets			
11	Property, plant and equipment	3,845	3,654
12	Investment property	170	197
13	Intangible assets	357	257
15	Investments recognised using the equity method	26	39
23	Other financial assets, including investments	158	267
10	Deferred tax assets	260	229
Total non-current assets		4,816	4,643
16	Inventories	161	139
17	Trade and other receivables	648	724
	Income tax receivables	24	4
19	Cash and cash equivalents	565	709
18	Assets held for sale	-	140
Total current assets		1,398	1,716
Total assets		6,214	6,359
Equity and liabilities			
24	Equity		
	Share capital	1,012	1,012
	Reserves	2,440	2,287
	Unappropriated result	24	212
	Total group equity	3,476	3,511
	Minority interest	1	-
Total equity		3,477	3,511
28	Deferred credits	314	328
25	Loans and borrowings, including derivatives	551	293
29	Employee benefits	30	31
30	Provisions	114	100
20	Accruals	21	36
10	Deferred tax liabilities	59	160
Total non-current liabilities		1,089	948
25	Loans and borrowings, including derivatives	201	77
	Corporate tax payable	26	7
21	Trade and other payables	1,126	1,023
22	Deferred income	246	641
30	Provisions	49	37
18	Liabilities held for sale	-	115
	Total current liabilities	1,648	1,900
Total liabilities		2,737	2,848
Total equity and liabilities		6,214	6,359

Consolidated cash flow statement for 2017

(in millions of euros)		2017	2016
	Result for the period	25	212
	Adjustments for:		
	Income tax expenses	2	49
	Results on investments in equity accounted investees	-18	-142
11,12,13	Depreciation	354	319
11,12,13	Impairment losses and reversals	15	26
	Net finance result	5	9
	Change in provisions	41	-54
15, 23	Change in non current financial assets (excluding deferred tax positions)	-	192
	Change in other non cash, non-current liabilities	-	55
	Change in deferred credits	-39	-23
		360	431
	Change in inventories	-21	-1
	Change in trade and other receivables	62	-171
	Change in current liabilities excluding credit institutions	-263	459
	Changes working capital	-222	287
	Interest paid	-22	-28
	Income tax paid	-151	-11
		-173	-39
	Net cash from operating activities	-10	891
	Interest received	8	20
15	Dividends received and recognised using the equity method	22	72
	Disposal of discontinued operation, net of cash	-13	-
11, 13	Acquisition of intangible assets and property, plant and equipment	-612	-784
12	Acquisition of investment properties	-7	-1
	Receipts (payments) other investments	-	270
	Acquisition of non-current financial assets, including investments	-11	-23
15, 23	Disposal of non-current financial assets, including investments	157	239
11,12,13	Disposal of intangible assets, property, plant and equipment and investment properties	1	23
	Net cash flow from investing activities	-455	-184
	Net cash flow from operating and investing activities	-465	707
	Repayments of liabilities	-121	-899
	Non-current liabilities taken out	496	300
	Dividends paid	-79	-41
	Net cash from financing activities	296	-640
	Net increase in cash and cash equivalents	-169	67
	Cash and cash equivalents as at 1 January	709	671
	Effect of exchange rate fluctuations on cash held	-9	5
	Cash and cash equivalents classified as held for sale	34	-34
	Cash and cash equivalents as at 31 December	565	709

Consolidated statement of changes in equity

(in millions of euros)	Share capital	Other reserves	Retained earnings	Total	Minority interests	Total equity
Balance as at 1 January 2016	1,012	3	2,294	3,309	-	3,309
Profit for the period			212	212	-	212
Other comprehensive income		32		32		32
Total comprehensive income	-	32	212	244	-	244
Dividend paid to shareholder			-41	-41	-	-41
Other		-	-1	-1		-1
Balance as at 31 December 2016	1,012	35	2,464	3,511	-	3,511
Profit for the period			24	24	1	25
Other comprehensive income		21		21		21
Total comprehensive income	-	21	24	45	1	46
Dividend paid to shareholder			-79	-79	-	-79
Other		-	-1	-1		-1
Balance as at 31 December 2017	1,012	56	2,408	3,476	1	3,477

Notes to the 2017 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 notes 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 2017 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 consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) and their interpretations by the International Accounting Standards Board (IASB) and endorsed by the European Union. The Executive Board prepared the financial statements on 28 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 28 February 2018, 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 20 March 2018.

Acquisition and disposal of companies

Sale of Qbuzz B.V.

On 13 July 2017, NS and Busitalia signed the final sale agreement for the sale of Qbuzz. The assets and liabilities of Qbuzz had been classified as 'held for sale' as of 11 July 2016 and NS stopped depreciation of the non-current assets as of that date. No material profit was made on the sale, which took place on 31 August 2017. In 2017, Qbuzz contributed €129 million to revenue.

Equity interest in WestfalenBahn increased

On 11 July 2017, Abellio concluded an agreement with the remaining shareholders of WestfalenBahn to transfer their stake (75%) to Abellio. This increases the Group's interest from 25% to 100%. The actual transfer took place on 6 December 2017. Since the increase in the stake in 2017, WestfalenBahn contributed €8 million to revenue and €0 to the result. The annual revenue of WestfalenBahn in 2017 was €146 million and it recorded a profit in 2017 of €5 million.

The following table gives a summary of the assets and liabilities that were acquired.

(in millions of euros)

Property, plant and equipment	6
Intangible assets	27
Current assets	30
Non-current liabilities	-8
Current liabilities	-19
Deferred tax liabilities	-9
Total nett assets acquired	27

The goodwill arising from the transaction was €18 million. The revaluation of the existing interest in WestfalenBahn of 25% at its fair value resulted in income of €3 million. This income was included in 'Share in result of equity accounted investees, accounted for using the equity method'.

Dilution of the share in Greater Anglia

On 12 January 2017, the Group signed a contract in which it sold 40% of its interest in Greater Anglia to Mitsui. The interest in Greater Anglia is fully consolidated as of 21 March 2017, whereby the minority interest is recognised in the 'Loans and other financial liabilities' (see note 25) and measured at amortised cost.

Significant accounting policies

The section below gives details of the important accounting policies used for consolidation, valuation of assets and liabilities, and determining the Group's result.

These policies have been applied consistently for all the periods presented in these consolidated financial statements, unless otherwise indicated.

Pursuant to Section 402 (paragraph 1), Part 9, Book 2 of the Dutch Civil Code, an abridged income statement is included in the company financial statements of NV Nederlandse Spoorwegen.

The financial statements are presented in euros (the functional currency), rounded to the nearest million. The financial statements have been prepared on the basis of historical cost, unless reported differently.

The figures for the previous year have been adjusted in order to make comparison possible.

The Group has applied the accounting policies for financial reporting as explained below consistently for 2017 in these consolidated financial statements.

As of 1 January 2017, the Group has adopted the following new standards and amendments to standards, including all consequent changes deriving from them in other standards. These new standards have not resulted in significant changes in the way the accounting policies are applied.

- Recognition of deferred tax assets for realised losses (amendments to IAS 12)
- Disclosure initiative (amendments to IAS 7)

New standards and amendments to standards that are mandatory from 2018 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 2018 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 2018 financial statements, or later where specified.

IFRS 9 – Financial Instruments

IFRS 9, published in July 2016, replaces the current regulations of *IAS 39, Financial Instruments: Inclusion and Valuation*. IFRS 9 contains revised regulations relating to the classification and valuation of financial instruments, including a new anticipated credit loss model for calculating impairments of financial assets, plus new general hedge accounting requirements. The stipulations in IAS 39 on including and ceasing to include financial instruments have been taken on board in the new standard. IFRS 9 will be effective for financial years starting on or after 1 January 2018, with the option of implementing the standard earlier than that. The Group has analysed the potential impact on the consolidated financial statements of applying IFRS 9, and that impact will be limited.

IFRS 15 – Revenue from Contracts with Clients

IFRS 15 defines a comprehensive framework for determining whether, to what extent and when revenues have to be included. It replaces the existing regulations relating to the recognition of revenue, including *IAS 18 Revenue*, *IAS 11 Construction Contracts* and *IFRIC 13 Customer Loyalty Programmes*. IFRS 15 will be effective for financial years starting on or after 1 January 2018, with the option of implementing the standard earlier than that. The Group has analysed the potential impact on the consolidated financial statements of applying IFRS 15, and that impact is expected to be limited.

IFRS 16 – Leases

A new standard IFRS 16 (Leases) was published on 13 January 2017. Applying this standard will be mandatory as of 1 January 2019. The way lease contracts are dealt with in the accounts will change fundamentally. IFRS 16 eliminates the current recognition method, in which a distinction is made between financial leasing (on the balance sheet) and operational leasing (off the balance sheet). Instead, there will be a single model for recognition, comparable to the current financial lease accounting. The Group has started analysing the impact of the new standard. It is expected that this standard will have a major impact on the Group's balance sheet and result, and that it will substantially expand the balance sheet.

Other matters

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

- Clarifications of IFRS 15 – Revenue from Contracts with Clients
- Uncertain tax positions (IFRIC interpretation 23)
- Classification and measurement of share based payment transactions (amendment to IFRS 2)
- Applying IFRS 9 *Financial Instruments* with IFRS 4 *Insurance Contracts* (amendments to IFRS 4)
- Annual IFRS improvement cycle 2014-2016
- Foreign currency transactions and advance consideration (IFRIC interpretation 22)
- Transfers of investment property (amendments to IAS 40)
- Prepayment features with negative compensation (amendments to IFRS 9)
- Long-term interests in associates and joint ventures (amendments to IAS 28)
- Annual IFRS improvement cycle 2015-2017

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 evaluations largely involve estimates of provisions/claims relating to irregularities (notes 30 and 31) and the 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 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 held-to-maturity investments and available-for-sale financial assets is determined using the price on the reporting date. The fair value of held-to-maturity investments is determined for disclosure purposes only.

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 millions of euros)	2017	2016
Netherlands	3,132	3,172
UK	1,743	1,727
Germany	246	194
Total revenue	5,121	5,093

The revenue in 2017 from Qbuzz, which was sold in 2017, was €129 million (€214 million in 2016). The revenue in 2017 in the United Kingdom when converted using the average exchange rate in 2017 was €1,865 million.

The revenue in the Netherlands includes a sum of €23 million (€22 million) for development activities. A change in the estimates concerning the allocation of grant income in the United Kingdom led to the recognition of an additional €19 million. The change does not affect the timing of the actual cash flows or the total amount of the grant that will be received throughout the franchise period.

Accounting policies

Revenue

Revenue covers revenue from passenger services and from other activities, less discounts and VAT.

Services rendered and goods sold

Revenue from services rendered is accounted for in the income statement in the period in which the services are rendered. For delivery contracts that extend beyond the balance-sheet date, the revenue is attributed to the individual years in proportion to the stage of completion of the transaction on the balance-sheet date. The stage of completion is determined using assessments of work performed.

Revenue from the sale of goods is recognised in the income statement when the significant risks and rewards of ownership have been transferred to the buyer, collection of the amount payable is likely, the associated costs or return of goods, where applicable, can be estimated reliably and when the management has no ongoing involvement in the goods and the scale of the revenue can be estimated reliably.

Payments from the government under passenger transport agreements or transport franchises are recognised in the income statement in the period to which the payment relates.

Rental income

Rental income from investment property is credited to the income statement on a straight-line basis over the duration of the rental agreement. The costs of undertakings given to encourage tenants to sign leases are accounted for as an integral component of the total rental income and allocated evenly over the contractual period.

Other revenue

This item comprises incidental revenue and coverage by third parties of the costs of sideline activities and other activities that are not part of the company's business operations. The difference between the revenue from sales and the carrying amount of items of property, plant and equipment that have been sold is also recognised under 'Other revenue'.

2. Personnel expenses

(in millions of euros)	2017	2016
Wages and salaries	1,488	1,467
Social security contributions	209	215
Contributions to defined contributions plans	97	90
Contributions to defined benefit plans	47	41
Other staff costs	69	75
Staff hired	146	151
Total	2,056	2,039

The average workforce was as follows.

(in fte)	2017	2016
Netherlands	19,897	19,886
UK	10,402	10,168
Germany	1,105	891
Total	31,404	30,945

This includes an average workforce at Qbuzz in 2017 of 1,139 FTEs (1,842 FTEs in 2016).

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

(in fte)	2017	2016
Netherlands	18,805	20,240
UK	12,785	10,152
Germany	1,447	996
Total	33,037	31,388

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	Termination benefits (excluding compensation legal costs)	Total 2016
Mr. R.H.L.M. van Bortel	438,600	40,450	-	-	4,368	14,171	-	497,588
Mr. H.L.L. Groenewegen*	101,289	8,571	4,629	-	1,286	4,169	-	119,943
Mrs. M.E.F. Rintel*	157,667	14,448	2,784	-	494	6,495	-	181,887
Mrs. S.M. Zijderveld*	315,333	26,673	14,410	-	4,004	12,990	-	373,410
Mr. E.M. Robbe**	176,922	26,251	2,207	-	22,969	5,904	-	234,254
Total	1,189,811	116,393	24,030	-	33,121	43,728	-	1,407,083

(in euro's)	Fixed salary	Alternative for the gap on pension accrual	Payment lease amounts	Compensation fiscal treatment executive car	Various allowances	Pension expenses	Termination benefits (excluding compensation legal costs)	Total 2017
Mr. R.H.L.M. van Bortel	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

* Mr Groenewegen was appointed to the Executive Board on 15 September 2016, Ms Rintel on 15 July 2016 (her remuneration for the period prior to this date is included in the table on the remuneration of key management personnel) and Ms Zijderveld on 1 February 2016.

** Mr Robbe left the company on 1 June 2016.

*** Mr Smit joined the company on 1 April 2017.

Mr A.P. Schouws was engaged as the Finance Director for the period 18 April 2016 to 15 September 2016. He received a management fee of €176,515 for this.

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
2016	3,013,445	168,129	565,956	3,747,530
2017	2,558,381	98,835	-	2,657,216

Remuneration of the Supervisory Board

The remuneration of members of the Supervisory Board for 2017 paid by the company totalled €205,371. In 2016, the remuneration of Supervisory Board members paid by the company was €173,716. 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)	2017	2016
G.J.A. van de Aast (Since August, 16 2016) <i>Chairman Supervisory Board , member auditcommittee, member remuneration and nomination committees</i>	44,344	37,923
J.J.M. Kremers <i>Chairman risk and audit committee</i>	36,673	34,994
P. Rosenmöller (since August 16, 2016) <i>Chairman remuneration and nomination committees, vice chairman Supervisory Board (since August 16, 2016)</i>	42,189	36,980
M.E. van Lier Lels ((Since February 3, 2016) <i>Member risk- and auditcommittee</i>	31,420	25,942
J.L. Stuijt (Since August 15, 2016)	31,420	11,379
T.M. Lodder (until June 2, 2016) <i>Chairman Supervisory Board, member remuneration and nomination committees</i>	-	16,750
I.M.G. Jankovich (until April 28, 2016)	-	9,748
W.J. van der Feltz (Since May 1, 2017)	19,325	-
Total	205,371	173,716

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)	2017	2016
Depreciation of property, plant and equipment	301	270
Depreciation of investment property	9	9
Amortisation of intangible assets	45	40
	355	319
Total depreciation and amortisation		
Impairment (and reversal of impairments) of property, plant and equipment	9	24
Impairment investment property	5	2
Impairment intangible assets	-	-
Total (reversal of) impairment losses	14	26
Total	369	345

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)	2017	2016
Materials	321	309
Energy	184	199
Total	505	508

5. Own capitalised production

The own capitalised production in 2017 of €161 million (2016: €128 million) refers mainly to the refurbishment of trains.

Accounting policies

The own capitalised production comprises the directly attributable personnel expenses, costs of materials and attributable indirect costs incurred in the construction of assets for own use.

6. Subcontracted work and other external costs

(in millions of euros)	2017	2016
Subcontracted work	73	75
Cleaning	95	87
Maintenance	122	149
IT costs	185	170
Total	475	481

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)	2017	2016
Dutch trainconcessions	381	383
English trainconcessions	443	389
German trainconcessions	106	89
Total	930	861

Accounting policies

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)	2017	2016
Statutory audits	2.5	2.6
Other assurance engagements	0.4	0.4
Tax advisory services	-	-
Other services	-	-
Total	2.9	3.0

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)	2017	2016
<i>Included in the income statement</i>		
Current taxes	-145	-22
Deferred taxes	143	-27
Total income tax	-2	-49
Reconciliation with effective tax rate		
Profit before tax	27	261
Income tax at Dutch tax rate for corporation tax (2017 en 2016: 25%)	-7	-65
Non-deductible costs	-10	-1
Other permanent differences	9	6
Effect of the tax rate in foreign jurisdictions (different rate)	17	10
Reversal devaluation deferred tax asset	67	-
Settlement previous years	-78	1
Total income tax	-2	-49
Income tax on income and expenses recognised directly in equity	-2	-11

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 7% (19% in 2016). The tax returns up to and including 2012 have been agreed with the Dutch Tax and Customs Administration. A final assessment has been received for 2013. An objection has been lodged against this assessment. 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 adjustments to previous years largely arise from the finalisation of the tax audit initiated by the Dutch tax authorities to examine the tax treatment of the lease contracts concluded by Dutch companies. The reversal of the downward value adjustment of the Dutch component of the deferred tax assets (€67 million) is the result of higher expected results from the fiscal unity in the Netherlands due to the transfer of the main rail network rolling stock.

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 fiscal unity, 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 2016	Recognised in income statement	Recognised in comprehensive income	Other changes	Net position Positions per 31 December 2016	Deferred tax assets	Deferred tax liabilities
Property, plant and equipment	-109	-8	-	-1	-118	23	141
Intangible assets	-7	-	-	-2	-9	-	9
Non-current financial assets	-11	9	-2	1	-3	4	7
Receivables	-	-	-	-	-	-	-
Provisions	-	3	-3	1	1	2	1
Deferred credits	73	-9	-	1	65	65	-
Loans and other financial obligations	13	-1	-6	-2	4	4	-
Other items	-1	-	-	-1	-2	-	2
Loss compensation	152	-21	-	-	131	131	-
Deferred tax assets (liabilities)	110	-27	-11	-3	69	229	160

(in millions of euros)	net balance as at 1 January 2017	Recognised in income statement	Recognised in comprehensive income	Other changes	Net position Positions 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

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 fiscal unity in the Netherlands.

As at 31 December 2017, the Group had deferred tax assets of €233 million for the fiscal unity in the Netherlands (€205 million as at 31 December 2016). These deferred tax assets are partly covered by deferred tax liabilities that produce taxable profits in the reference period through to 2024 and forecast profits through to 2024, based on the Concern Plan 2018-2022. 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. The reversal of the downward value adjustment of the Dutch component of the deferred tax assets (€67 million) is the result of higher expected results from the fiscal unity in the Netherlands due to the transfer of the main rail network rolling stock. The adjustments to previous years largely arise from the finalisation of the tax audit initiated by the Dutch tax authorities in order to examine the tax treatment of the lease contracts concluded by Dutch companies.

A rate of 25% applied in 2017 for Dutch corporate income tax (25% in 2016). The applicable rate of 25% was assumed for the calculation of the deferred tax position of the Dutch entities.

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, 2016								
Cost	125	688	144	5,860	97	526	514	7,954
Cumulative depreciation and impairments	28	274	112	3,757	69	418	-	4,658
Carrying amount as at 1 January, 2016	97	414	32	2,103	28	108	514	3,296

Changes in 2016

Additions							704	704
Capitalisations	47	70	7	406	1	58	-542	47
Depreciation	-2	-25	-7	-206	-3	-27	-	-270
Exchange rate differences	-	-1	-	-2	-	-3	-	-6
Divestments	-4	-1	-3	-6	-	-2	-	-16
Impairments	-	-24	-	-	-	-	-	-24
Reversal impairments	-	-	-	-	-	-	-	-
Other changes	-	-3	1	-62	-	-9	-4	-77
Total changes	41	16	-2	130	-2	17	158	358

Composition per 31 December 2016

Cost	168	750	144	6,139	97	529	672	8,499
Cumulative depreciation and impairment	30	320	114	3,906	71	404	-	4,845
Carrying amount as at 31 December 2016	138	430	30	2,233	26	125	672	3,654

Changes in 2017

Additions							508	508
Capitalisations	5	37	12	250	6	88	-398	-
Acquisitions	-	-	-	-	-	6	-	6
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

The 'Other changes' in 2016 were mainly due to the transfer of property, plant and equipment amounting to €76 million to 'Assets held for sale' (note 18). 'Assets under construction' consist primarily of investments in trains and buildings. In 2017, there was an adjustment of €18 million to the depreciation; this concerned maintenance costs that had incorrectly been capitalised in the past. No error correction was made for reasons of material relevance, and the amount was adjusted in the depreciation.

Some of the trains included in the balance sheet are covered by past cross-border lease transactions. The carrying amount of rolling stock financed by cross-border leases was €73 million as at year-end 2017 (2016: €81 million).

Collateral has been provided for EUROFIMA loans in the form of pledges on rolling stock (see too note 31). The carrying amount for this is €4 million (2016: €10 million). The reduction in the pledge is mainly due to the reduction in the EUROFIMA loans.

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); 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 2016

Cost	295
Cumulative depreciation and impairments	-101
Carrying amount as at 1 January 2016	194

Changes in 2016

Additions	1
Depreciation	-9
Divestments	-
Impairment	-2
Reversal impairment	-
Other changes	13
Total changes	3

Composition per 31 December 2016

Cost	306
Cumulative depreciation and impairment	-109
Carrying amount as at 31 December 2016	197

Changes in 2017

Additions	7
Depreciation	-9
Divestments	-4
Impairments	-5
Reversal impairment	-
Other changes	-16
Total changes	-27

Composition per 31 December 2017

Cost	304
Cumulative depreciation and impairments	-134
Carrying amount as at 31 December 2017	170

The 'Other changes' in 2016 concern the transfer from other asset categories to 'investment property'.

In view of the nature, diversity and locations (station areas), the fair value of the investment property portfolio is not determined on a regular basis, unless impairment 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 around €121 million in 2017. No contingent rent is charged.

The direct rental income was €32 million (2016: €33 million). The direct rental costs comprise maintenance costs, property taxes and direct management costs, totalling €9 million (€9 million in 2016).

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 2016			
Cost	38	361	404
Cumulative depreciation and impairment	5	169	179
Carrying amount as at 1 January 2016	33	192	225
Changes in 2016			
Additions	-	86	86
Depreciation	-	-40	-40
Divestments	-	-	-
Impairment	-	-	-
Reversal impairment	-	-	-
Other changes	-13	-1	-14
Total changes	-13	45	32
Composition per 31 December 2016			
Cost	20	469	489
Cumulative depreciation and impairment	-	232	232
Carrying amount as at 31 December 2016	20	237	257
Changes in 2017			
Additions	-	103	103
Acquisitions	18	28	46
Depreciation	-	-45	-45
Divestments	-	-	-
Impairments	-	-	-
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

The increase in the goodwill in 2017 relates to the increase in the stake in WestfalenBahn from 25% to 100%.

The 'Other changes' in 2016 are mainly the result of goodwill being transferred to 'assets held for sale'. 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 6% (2016: between 5.5% and 7%). Changes in the assumptions have not resulted in any deviation in the calculated amounts.

Prompted by developments in the rental portfolio of a limited number of station complexes in the Netherlands, a review was carried out of the recoverable amount for these complexes. The commercial value was measured at €66 million. This led to an impairment of €11 million, €6 million of which is accounted for in property, plant and equipment and €5 million in investment property (€16 million in 2016).

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 €26 million (2016: €39 million). The financial data for these investments is as follows.

Name entity (in millions of euros)	Merseyrail Ltd	Northern Rail Ltd	Vastgoed fondsen	Other joint ventures	Total joint ventures	Other associates	Total
Share percentage	50.00%	50.00%	53.00%				
2016							
Current assets	38	20	38	2		42	
of which cash and cash equivalents	24	17	34	-		24	
Non-current assets	11	-	-	2		21	
Current liabilities	38	15	9	1		17	
of which current financial liabilities	-	-	-	-	-	1	
Non-current liabilities	1	-	-	-		23	
of which non-current financial liabilities	1	-	-	-		-	
Net equity (based on 100%)	10	4	28	3		20	
Carrying value investments in investees recognised using the equity method	5	2	15	2	24	15	39

Name entity (in millions of euros)	Merseyrail Ltd	Northern Rail Ltd	Vastgoed fondsen	Other joint ventures	Total joint ventures	Other associates	Total
Revenue	182	165	483	27		89	
Depreciation, amortisation and impairment	2	2	17	1		4	
Result from operating activities	23	19	228	4		-	
Finance income	-	-	-	-		-	
Finance expense	-	-	-	-		-	
Income tax expense	5	4	-	-		-	
Result for the period	18	15	228	4		-	
Total comprehensive income over the period	29	33	-	4		1	
Share in result of investees recognised using the equity method	9	7	121	3	140	2	142
Share in other comprehensive income	1	2	-	-	3	-	3
Share in total comprehensive income of investees recognised using the equity method	10	9	121	3	143	2	145
Dividend received	8	12	49	3	72	-	72

Name entity (in millions of euros)	Merseyrail Ltd	Northern Rail Ltd	Vastgoed fondsen	Other joint ventures	Total joint ventures	Other associates	Total
Share percentage 2017	50.00%	50.00%	53.00%				
Current assets	51	8	19	2		17	
of which cash and cash equivalents	40	7	18	-		10	
Non-current assets	6	-	-	2		6	
Current liabilities	43	5	2	-		11	
of which current financial liabilities	-	-	-	-	-	1	
Non-current liabilities	-	-	-	-		-	
of which non-current financial liabilities	-	-	-	-		-	
Net equity (based on 100%)	13	3	15	3		12	
Carrying value investments in investees recognised using the equity method	7	2	8	2	19	7	26

Name entity (in millions of euros)	Merseyrail Ltd	Northern Rail Ltd	Vastgoed fondsen	Other joint ventures	Total joint ventures	Other associates	Total
Revenue	174	-	1	28		34	
Depreciation, amortisation and impairment	2	-	-	-		4	
Result from operating activities	21	4	1	5		-	
Finance income	-	-	-	-		-	
Finance expense	-	-	-	-		-	
Income tax expense	4	1	-	-		-	
Result for the period	18	3	1	5		-	
Total comprehensive income over the period	18	4	-	4		1	
Share in result of investees recognised using the equity method	10	2	-	2	14	4	18
Share in other comprehensive income	-	1			1	-	1
Share in total comprehensive income of investees recognised using the equity method	10	3	-	2	15	4	19
Dividend received	10	2	8	-	20	2	22

Interests in joint ventures

Merseyrail Services Holding Company Ltd and Northern Rail Holdings Ltd

The Merseyrail franchise and Northern Rail franchise (2016) 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.

Property funds

The Group has direct and indirect interests in the following limited partnerships:

	Percentage participation	Statutory seat
Stationslocaties OG CV	55.8	Utrecht
Basisfonds Stationslocaties CV	50.9	Utrecht

The parties with a participating interest in the limited partnerships have raised a joint equity stake that is invested in property with the participants sharing costs and risks. The Group is also the controlling partner, investing and managing the equity at the costs and risks of the partners, with the managing partner being jointly and severally liable for the liabilities of the limited partners. The interests in the property funds are classified as joint ventures. The shareholders in the funds have taken a formal decision to break up the structure.

In 2016, the Basisfonds Stationslocaties CV sold the office portfolio for the sum of €455 million (100%). This led to a profit of €117 million for NS.

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, 2017	December 31, 2016
Maintenance materials	133	120
Projects under construction, unsold	8	5
Trade goods	20	14
Total	161	139

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 2017, the write-down of inventories to the net realisable value, which was recognised as an expense, amounted to €10 million (€11 million in 2016). The cumulative impairment, after withdrawals, came to €97 million at the end of 2017 (€94 million at year-end 2016).

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, 2017	December 31, 2016
Receivables from clients from projects in progress	-	1
Trade receivables	246	228
Unbilled revenue	208	202
Other taxes and social security charges	26	23
Other receivables	168	270
Total	648	724

'Trade and other receivables' includes the sum of €3 million (€104 million in 2016) that concerns related parties (ProRail and the Dutch national government).

As at 31 December 2016, the 'Other receivables' included the current part of the receivable (€120 million) payable by SPF (the Railway Pensions Fund) and the current portion of the receivable relating to the franchise fee correction mechanism (€15 million).

The ageing of trade receivables as at the reporting date was as follows.

(in millions of euros)	December 31, 2017		December 31, 2016	
	Gross	Provided for	Gross	Provided for
Not past due	206	-	137	-
Past due 0-30 days	23	-	78	-
Past due 31-120 days	14	-	7	1
Past due 121-180 days	3	1	4	1
Past due 181-360 days	1	1	6	2
Past due more than one year	3	2	2	2
Total	250	4	234	6

Impairment losses

The movement in the provision for impairments of trade receivables during the year was as follows.

(in millions of euros)	2017	2016
Balance as at 1 January	6	8
Additions	1	2
Use	-2	-3
Release	-1	-1
Balance as at 31 December	4	6

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, 2017	December 31, 2016
Costs of work in progress	9	10
Realised gains and losses	-	-1
	9	9
Less: billed instalments	9	12
	-	-3
Presented under:		
Receivables from clients for projects in progress	-	1
Advance payments received for projects in progress	-	-4

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

The sale of the participating interest in Qbuzz B.V. was initiated on 11 July 2016, after which depreciation and amortisation of non-current assets ceased. The assets and liabilities held for sale as at 31 December 2016 consisted of:

(in millions of euros)	December 31, 2016
Property, plant and equipment	76
Intangible assets	13
Other financial assets, including investments	2
Deferred tax assets	1
Trade and other receivables	13
Cash and cash equivalents	35
Assets held for sale	140
Loans and borrowings, including derivatives	62
Provisions	2
Trade and other payables	34
Deferred income	17
Liabilities held for sale	115

The assets and liabilities held for sale are valued at the carrying amount given that the fair value less cost of sales exceeds this carrying amount.

On 13 July 2017, NS and Busitalia signed the final sale agreement for the sale of Qbuzz. No material profit was made on the sale.

The 'Loans and borrowings' consist of finance lease commitments, which constituted a gross liability as at 31 December 2016 of €68 million using an average actuarial interest rate of 3.8%. As at year-end 2016, collateral amounting to €68 million was provided for leased assets.

19. Cash and cash equivalents

(in millions of euros)	December 31, 2017	December 31, 2016
Cash and bank balances	565	709

The cash and bank balances are at the free disposal of the company, with the exception of €101 million (€62 million as at 31 December 2016). 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

The accruals include the non-current part of the outstanding pension contributions for employees (€21 million, compared with €36 million as at 31 December 2016) 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.

21. Trade and other payables

(in millions of euros)	December 31, 2017	December 31, 2016
Advance payments received for work in progress	1	4
Trade payables	287	239
Current portion of deferred credits	40	40
Other taxes and social security charges	106	83
Other liabilities	424	461
Accrued expenses and deferred income	268	196
Total	1,126	1,023

The 'Accrued expenses and deferred income' include the funds received in the context of the FENS agreement (fund for one-off contributions). At the end of 2012, NS received a sum from ProRail as a consequence of the implementation of the addendum to the FENS framework agreement. The total outstanding liability (€27 million) has been allocated through project-related decisions. About €11 million of this liability is expected to have a term of more than one year.

The 'Trade and other payables' item includes an amount of €7 million (€16 million in 2016) 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 €246 million (2016: €641 million) consists largely of season ticket payments received in advance.

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.

23. Other non-current financial assets, including investments

(in millions of euros)	December 31, 2017	December 31, 2016
Other non-current financial assets, including investments		
Available-for-sale financial assets	48	89
Loans and receivables	58	127
Financial leases	45	29
Other investments	2	22
Total	153	267

Bonds and term deposits (included in 'Available-for-sale financial assets') are held in part for the payment of the capital expenditure commitments of €1,437 million (€1,428 million in 2016), repayments and interest payments on the loans, and long-term provisions and liabilities.

As at year-end 2017, the 'Loans and receivables' included the sum of €52 million from the Ministry of Infrastructure and Water Management concerning the franchise fee correction mechanism (see note 31).

Accounting policies

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.

Available-for-sale financial assets

The Group's investments in certain bonds and deposits are classified as available-for-sale financial assets. Subsequent to initial recognition, these assets are measured at fair value, and any changes in the fair value, other than impairment losses and exchange rate gains and losses on available-for-sale monetary items, are recognised directly in equity via the comprehensive income. Attributable transaction costs are charged to the income statement when they are incurred. When an investment ceases to be recognised in the balance sheet, the cumulative profit or loss in equity is transferred to the income statement.

If no information is available for determining the fair value, the assets are measured at cost.

Held-to-maturity financial assets

If the Group has the express intent and ability to hold financial assets to maturity, they are measured at amortised cost plus any directly attributable transaction charges, using the effective interest method, less any impairment losses.

Other non-derivative financial instruments (loans and receivables, finance leases and other non-current financial assets)

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.

Impairments of financial assets

Financial assets are assessed at each reporting date to determine whether there is objective evidence of any impairment. A financial asset is considered to be impaired if there is objective evidence indicating that one or more events have had a negative effect on the projected future cash flows of that asset.

An impairment loss on a financial asset stated at amortised cost is calculated as the difference between the carrying amount and the present value of the projected future cash flows, discounted using the original effective interest rate. An impairment loss on an available-for-sale financial asset is calculated using the fair value.

Significant financial assets are assessed individually for impairment. The remaining financial assets are grouped into comparable credit risk groups and assessed collectively.

All impairment losses are charged to the income statement. Any cumulative loss on an available-for-sale financial asset that was recognised previously in equity is transferred to the income statement.

An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost and available-for-sale financial assets in the form of bonds, 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.

Section 5 Financing, Financial risk management and financial instruments

24. Equity

See the consolidated statement of changes in equity for the movements in equity.

The authorised capital as at both 31 December 2017 and 31 December 2016 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 2016 and the profit appropriation were determined in the shareholders' meeting of 27 February 2017. In accordance with the proposal, a sum of €133.3 million from the profit over the reporting period of €212 million was added to the reserves and a sum of €78.7 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 2016	8	-43	-	17	21	3
Other comprehensive income	-19	36	-	12	3	32
Revised balance as at 31 December 2016	-11	-7	-	29	24	35
Other comprehensive income	-3	3		19	2	21
Balance as at 31 December 2017	-14	-4	-	48	26	56

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 €15.6 million of the net profit of €24 million to the general reserves and to distribute the remaining €8.4 million as dividend.

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 available-for-sale investments 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, 2017	December 31, 2016
Non-Current liabilities		
Private loans	465	240
Finance lease liabilities	32	47
Other financial liabilities	48	-
Interest rate swaps used for hedging	2	3
Commodity derivatives	4	3
Total	551	293
Current liabilities		
Private loans	181	74
Finance lease liabilities	1	-
Current accounts banks	19	-
Interest rate swaps used for hedging	-	-
Commodity derivatives	-	3
Total	201	77
Total liabilities	752	370

The 'Private loans' item includes a debt payable by the Group to the Ministry of Infrastructure and Water Management of €213 million (2016: €246 million) associated with the deferred payments of franchise fees. Of that sum, €180 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 2018 (€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 minus 0.42% to plus 0.75%.

The finance lease liabilities have a gross liability of €47 million and an applicable actuarial interest rate of 1.7%. They concern leases in perpetuity. 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

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
- Risks deriving from cross-border transactions

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, Abellio and NSFSC 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, 2017	December 31, 2016
Assets/liabilities with a variable interest rate		
Financial liabilities	-	-59
Effects interestswaps	-	28
	-	-31
Assets/liabilities with a fixed interest rate		
Financial liabilities	744	-255
Effects interestswaps	-	-28
	744	-283
Financial assets		
Assets/liabilities with a fixed interest rate	97	209
Assets/liabilities with a variable interest rate	565	709

Cash-flow interest-rate risk

The cash-flow interest-rate risk is the risk that future cash flows generated by a financial instrument with a variable interest rate will fluctuate as a consequence of movements in market rates.

A reasonably feasible change of 0.5% in the interest rate as of the reporting date would cause equity and the result to increase or decrease by the amounts stated below. This analysis assumes that all other variables, notably the exchange rates, remain constant.

Sensitivity of the post-tax profit/loss and equity to variable interest rates

(in millions of euros)	Results, after taxes		Equity after taxes	
	Increase of 0.5%	Decrease of 0.5%	Increase of 0.5%	Decrease of 0.5%
December 31, 2016				
Financial instruments with a variable interest	3	-3	-	-
Interestswaps	-	-	-	-
Sensitivity of cash flows (net)	-	-	-	-
December 31, 2017				
Financial instruments with a variable interest	-	-	-	-
Interestswaps	-	-	-	-
Sensitivity of cash flows (net)	-	-	-	-

As at 31 December 2017, the Group had no loans hedged using interest swaps.

(in millions of euros)	December 31, 2017	December 31, 2016
<i>Cashflow hedge accounting</i>		
Hedged value of the underlying private loans	N.A.	28
Underlying value of the interest rate swaps	N.A.	28
Hedge effectiveness	N.A.	100%

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 2017, the carrying amount of this instrument is €2 million negative.

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 2017 and 2016, no materially significant positions were held in currencies other than the functional currency of the business units concerned.

At the end of 2017, 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 2017 was €44 million (€30 million at year-end 2016). The fair value of these currency derivatives at the end of 2017 was €1 million (year-end 2016: €1 million).

Sensitivity analysis for foreign currencies

Given that no materially significant items in financial instruments were held in foreign currencies at the end of 2017 or the end of 2016, 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 2016 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 2018 to 2020) 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 2017 of €4 million (€6 million as at 31 December 2016) 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 €17 million (31 December 2014: €15 million) and equity would increase by €13 million (31 December 2016: €12 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, 2017	December 31, 2016
Available-for-sale financial assets	23	48	89
Loans and receivables	23	58	127
Finance leases	23	45	29
Other financial assets	23	2	22
Trade and other receivables	17	414	498
Cash and cash equivalents	19	565	709
Total		1,132	1,474

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 2017 or 2016. 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 9% (2016: 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 €100 million up to December 2020, plus a standing credit facility of €345 million available until May 2022.

At the end of 2017, the cash and cash equivalents (instruments that can be converted into cash in short order) comprised €1,131 million (2016: €1,434 million). The contractual financial obligations due within one year total €893 million (2016: €788 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.

December 31, 2016

(in millions of euros)	Carrying amount	Contractual cash flows	< 6 mth	6-12 mth	1-2 yr	2- 5 yr	> 5 yr
Non-derivative financial liabilities							
Private loans	314	314	29	44	71	114	56
Finance lease liabilities	47	47	-	1	1	2	43
Trade and other payables	702	702	702	-	-	-	-
Derivative financial liabilities							
Interest rate swaps used for cash flow hedging	3	3	-	-	-	1	2
Interest rate swaps used for fair value hedging	-	-	-	-	-	-	-
Commodity derivatives	6	11	1	1	2	1	6
Total	1,072	1,077	732	46	74	118	107

December 31, 2017

(in millions of euros)	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

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 2017.

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 €46 million. NS Insurance meets this requirement comfortably. NS Insurance is fully consolidated in the Group figures.

Risks deriving from cross-border lease transactions

Up until 1998, the Group entered into cross-border lease transactions with the object of reducing financing costs. These cross-border leases relate only to rolling stock. Economic ownership remains with the Group, so the assets concerned are included in the balance sheet. The carrying amount of the rolling stock financed by cross-border leases was €73 million at year-end 2017 (2016: €81 million). The financing benefit from the cross-border leases has been deducted from the financing costs, spread over the terms of the transactions concerned in the income statement. Some of the positions involved in these leases are off-balance sheet positions. The currency risk in these contracts is hedged, exceptional unforeseen situations notwithstanding. The last cross-border lease transaction was completed at the start of 2018 and will be settled in the course of 2018.

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)	2017	2016
Interest income from available-for-sale financial assets	1	1
Interest income from deposits and banks balances	-	-
Exchange rate differences	3	9
Other interest income from other investments	12	12
Finance income	16	22
Interest expense from financial liabilities measured by amortised cost	-11	-21
Interest expenses from interest rate swaps for cash flow hedging	-	-13
Financial benefits	-	4
Exchange rate differences	-3	-1
Interest expenses from discounting of provisions	-2	-
Other financial expenses	-5	-
Finance expense	-21	-31
Net finance result included in the income statement	-5	-9

The 'Other interest income from other investments' in 2016 includes an amount of €6 million that relates to the interest component of the settlement of a historical claim.

Accounting policies

Finance income includes the interest income from monies invested (including from available-for-sale financial assets), leasing income, profits from the sale of available-for-sale 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 2016 or 2017.

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, 2017	December 31, 2016
Lump sum payments	228	249
Adjustment mechanism for the main rail network concession	121	119
Deferred credits	349	368
Less: current	-40	-40
Total non-current as at 31 December	309	328

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, 2017	December 31, 2016
Defined benefit plans	2	2
Other long-term employee benefits	28	29
Total	30	31

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, 2017	December 31, 2016
Railway pensionfund	17,020	16,514
Industry pensionfund Horeca & Catering	2,837	2,719
Industry pensionfund provision company	765	991
Additional pensionfund Servex	93	149
ScotRail	4,713	4,665
East Anglia/ Greater Anglia	2,308	2,302
Abellio Transport Holdings	25	170
Abellio London & Surrey	2,041	2,120
Qbuzz	-	1,829
Abellio West Midlands	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 2017 was €144 million (2016: €131 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 2017, 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 2016. 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 2017, the net liabilities of Abellio Transport Holdings Limited were €2 million (€2 million in 2016). 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 2017, the net liabilities were €0 (year-end 2016: €0). The average term for the companies' pension liabilities is about 20 years.

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, 2017	December 31, 2016
Discount rate	2.9%	2.9%
Increase of salaries	2.6%	2.7%
Increase of pension benefits	2.0%	2.1%
Inflation	2.0%	3.2%

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, 2017	December 31, 2016
Fair value of plan assets	1,829	1,193
Defined benefit obligations	2,401	1,721
Deficit	572	528
Members' share of deficit	-229	-211
Deficit at the end of the concessionary	-341	-315
Write-down of pension surplus	-	-
Group's commitments concerning franchise period	2	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)	2017	2016
Discount rate	-130	-84
Inflation	140	89
Future salary increase	36	31

A change in life expectancy of one year would lead to a change in the gross liability of about €60 million (€43 million as at 31 December 2016).

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)	2017	2016
Plan assets as at 1 January	1,193	1,221
Addition new fund	531	437
Interest income	34	40
Pension contributions	37	38
Pension benefits paid	-33	-75
Administration expenses	-6	-5
Return on plan assets, excluding interest income	119	141
Reduction participants in the fund	-	-437
Exchange rate gains and losses	-46	-167
Plan assets as at 31 December	1,829	1,193

(in millions of euros)	2017	2016
Defined benefit obligations as at 1 January	1,720	1,700
Addition new fund	705	698
Pension costs	71	64
Interest expenses	49	55
Pension benefits paid	-33	-75
Net actuarial gain or loss	-44	210
Reduction participants in the fund	-	-698
Exchange rate gains and losses	-67	-233
Defined benefit obligations as at 31 December	2,401	1,721

Breakdown of plan assets

The breakdown of the plan assets is as follows.

(in millions of euros)	December 31, 2017	December 31, 2016
Shares	1,150	722
Fixed-income securities	207	148
Property	173	121
Cash	251	146
Other	48	56
Total	1,829	1,193

Pension costs recognised in the income statement

(in millions of euros)	2017	2016
Pension costs	43	38
Interest expenses	-	-
Administration expenses	4	3
Total	47	41

Unrealised actuarial gains and losses

(in millions of euros)	2017	2016
Net actuarial gain or loss		
-Demographic assumptions	-	-
-Financial assumptions	39	-244
-Experience adjustments	5	35
Return on plan assets, excluding interest income	119	141
Franchise adjustment	-74	58
Changes in members' share	-68	23
Total	21	13

Based on current accounting policies, the Group expects to recognise pension costs for Abellio of €71 million for the above defined benefit plans in 2018.

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)	2017	2016
Long-service award obligation as at 1 January	29	28
Payments	-3	-4
Actuarial gains and losses	-	2
Accrued interest	2	3
Long-service award obligation as at 31 December	28	29

The current portion of this provision is €3 million.

The sensitivities are as follows.

	2017	2016
Discounting (-0.5%)	4.6%	4.4%
Total wage increase (-0.5%)	4.2%	4.1%
Career opportunities (+25%)	3.0%	2.8%
Resignation probability (+25%)	-5.0%	-4.7%

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 2017	10	67	60	137
Addition	7	5	61	73
Accrued interest	-	-	-	-
Withdrawal	-5	-1	-16	-22
Other changes	-	-	-	-
Release	-1	-1	-23	-25
Carrying amount as at 31 December 2017	11	70	82	163
Presented as:				
Non-current	2	67	45	114
Current	9	3	37	49

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 2016).

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

Irregularities

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).

The ACM then carried out a further investigation into the possible abuse of their position of economic power by NS and its subsidiaries in the Limburg tendering process under the Competitive Trading Act and EU competition rules. The ACM sent a report on the investigation to NS on 7 July 2016. NS submitted its views on this.

On 22 May 2017, the ACM informed NS of its decision and 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 fine of €40.95 million on NS. Based on a norm framework that the ACM itself devised, the ACM has 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 has 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. A hearing took place on 2 November 2017, during which NS clarified its written objections. The ACM is expected to reach its decision about the objection in the first quarter of 2018.

Even though NS had lodged an objection, it was still required to pay the fine within 24 weeks. The fine was imposed in 2017 and has been 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.

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 on 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, transaction etc.). As a result, no provision has been recognised.

Other matters

There is an inherent risk that additional claims will follow as a result of the irregularities that have been observed. The claims mentioned above could have a material impact on the results and equity position of NS. Because the outcome cannot be reliably estimated at this point in time, no provisions have been included for it.

Long-term contracts

There were a number of long-term financial commitments to third parties at year-end 2017. 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, 2017	December 31, 2016
< 1 year	546	366
1-5 years	1,481	1,215
>5 years	1,738	536
Total	3,765	2,117

In 2017, a sum of €393 million was accounted for as a liability 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, 2017	December 31, 2016
< 1 year	13	19
1-5 years	50	63
>5 years	80	91
Total	143	173

Energy contracts

As at the end of 2017, 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 2018-2024 (the remainder of the 10-year contract) came to €227 million (as opposed to €231 million at the end of 2016). The volume expected to be required for 2018 and 2019 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 2017, NS had received €11 million in collateral in the form of margin money.

With respect to the forward contracts that are used to hedge fuel costs abroad, Abellio has given guarantees for a sum of €4 million.

For more detailed information about the energy contracts, see note 26.

Fiscal unity

For the purpose of income tax, all the Dutch subsidiaries belonging to the Group are part of the NS fiscal unity. As a result, the Group is jointly and severally liable for all tax liabilities of the subsidiaries included in the fiscal unity.

Investment commitments

At the end of 2017, the Group had outstanding investment commitments of €1,437 million (2016: €1,428 million), primarily for purchasing and upgrading trains and investments in the areas around the stations.

Contingent liabilities

The Group has paid €26 million (after conversion) of its share in the issued share capital of EUROFIMA AG (a sum of €103 million after conversion). The Group has a liability for full payment on demand of the shares and other guarantee commitments totalling €258 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 €784 million (31 December 2016: €869 million) relating to the operation of the various franchises.

Franchises

The Group has the following franchises.

Concessions in 2017	Expiry date	Type contract
Netherlands		
Main rail network/ HSL-South	December 31, 2024	net
Regional train concessions	see hereafter	net
Great Britain		
Merseyrail-concession surrounding Liverpool	July 20, 2028	mixed
Greater Anglia-concession (East Anglia)	October 12, 2015	mixed
Abellio London-concession (bus)	see hereafter	gross
ScotRail-concession in Scotland (from 1 April 2015)	March 31, 2022	mixed
West Midlands-concession	March 31, 2026	mixed

Concessions in 2017	Expiry date	Type contract
Germany		
Emscher Ruhrtal	December 1, 2019	gross
Ruhr Sieg Netz	December 1, 2034	gross
Der Mungstener	December 1, 2028	gross
Saale-Thüringen-Südharz (vanaf 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). In 2017 the Ministry of Infrastructure and the Environment imposed a fine on NS of €1.25 million for 2016 (this had already been anticipated in the 2016 financial year).

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 €132 million in 2017. 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 2015. Any entitlement to an adjustment was first calculated in 2016 using the average return on investment for 2015 and 2016, and thereafter on a rolling basis using the previous three years. An entitlement to an adjustment to the franchise price deriving from the implementation agreement does not lapse if at any point in subsequent years the return on investment exceeds the threshold value. Payment of any entitlement that may have arisen 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 2016; this payment is amortised on a straight-line basis over the entire term of the franchise. This arrangement is capped at €290 million (including the one-off payment) and will never result in a payment to NS by the Ministry of Infrastructure and Water Management. No energy cost adjustment is owed for 2017.

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 2017, NS operated the following four franchises, which will run for the periods stated:

- Gouda – Alphen aan den Rijn until 11 December 2031
- Zwolle – Kampen until 9 December 2017
- Zwolle – Enschede until 9 December 2017
- Rotterdam – Hoek van Holland Strand until 31 March 2017

The franchises were awarded by the relevant provinces or metropolitan regions. A fee is received from the franchise authority for the operation of the franchises.

United Kingdom

Merseyrail franchise

This franchise is operated as a 50-50 joint venture with Serco, a listed British company. It concerns passenger transport on the rail network in the region around Liverpool. There is an obligation to operate defined services (timetable, quality of the service) for a fixed fee paid by the regional authorities. Every five years there is an evaluation that includes checking whether the operations are still 'efficient'. Merseyrail has successfully been through two evaluations and the third evaluation is scheduled for 2018. The franchise runs for 25 years (through to 20 July 2028). There is an option for a five-year extension. The annual payment received from the authorities (the grant) is determined in the contract and is indexed annually.

Greater Anglia franchise (East Anglia)

Abellio was the operator of the previous Greater Anglia franchise, which expired in October 2016, and won the new Greater Anglia concession in August 2016. This franchise is operated by the full subsidiary Abellio East Anglia Ltd. On 17 January 2017 it was announced that the proposal is to sell 40% of the share of the concession to Mitsui. The concession operates passenger transport on the rail network in the Anglia region in the east of England. The number of train-kilometres for this concession is around 29 million per annum. The concession started operation on 16 October 2016 and runs to 12 October 2025, with an option for a further extension of a year. There is an obligation for the replacement of the entire current fleet, with new vehicles by September 2020 to run on the Rural, Intercity, Stansted Express, West Anglia and Great Eastern routes. This will increase the number of seats. Other obligations include a commitment to invest GBP 120 million in depot facilities and GBP 60 million in station upgrades.

ScotRail franchise

Abellio won the ScotRail franchise in October 2014. The franchise started on 1 April 2015 and will run for at least seven years. An extension to 31 March 2025 is possible by mutual consent after an evaluation in Year 5, with an option for a further extension of two years through to 31 March 2027. The ScotRail franchise was awarded by Transport Scotland and is operated by the fully-owned subsidiary Abellio ScotRail Ltd, providing intercity, regional and provincial passenger transport by train on the Scottish national rail network. There is an obligation to provide the specified services (timetable, quality of the services) for a predetermined fee paid by the government (grant), which is indexed on an annual basis.

West Midland franchise

Abellio started the West Midlands franchise on 10 December 2017. The franchise runs until 2025/2026. It covers the area around Birmingham as well as the services from London Euston to Crewe and from Liverpool to Birmingham. The franchise is operated by West Midlands Trains Ltd, a joint venture between Abellio, East Japan Railway Company and Mitsui & Co Ltd. The new franchise agreement stipulates that new trains should be introduced in 2021 to provide room for more passengers during peak periods in Birmingham and London. The long trains will mean more seats and more room for passengers. In this franchise, investments are also being made in a better ticketing system and improved journey information as part of the changes intended to improve passengers' journeys.

Franchises in London

Abellio London operates bus routes in London from a number of depots (with an 8% market share). The franchises have terms of five years on average with an option for an extension of two years, depending on the attainment of various performance criteria.

Germany

Abellio operates various train services in the North Rhine-Westphalia (NRW) and Central Germany regions for a predetermined fee paid by the government (grant), which is indexed on an annual basis. The franchises run for periods that end at various points between 2019 and 2030.

In December 2016, the German section of the Niederrhein-Netz franchise started.

In June 2016 Abellio was awarded two routes of the Rhine-Ruhr-Express (RRX), operation of which will start in two steps. The first route, from Münster to Dortmund, Düsseldorf, Cologne and Aachen, will start in 2018 and the second, from Düsseldorf to Dortmund, Paderborn and Kassel, in 2020.

In November 2016 Abellio won the Stuttgarter Netze franchise. Abellio will operate the franchise from June 2019 with new trains in the Baden-Württemberg region.

Abellio also won the Saxony-Anhalt diesel network (DISA) franchise in December 2016. Abellio will start operating this franchise from December 2018 on a number of routes in the Saxony-Anhalt region.

In July 2016 Abellio won the S-Bahn Rhein-Ruhr franchise. Abellio will start operating this franchise from December 2019 on a number of routes in the NRW region.

In December 2016 Abellio successfully managed to defend its Ruhr-Sieg-Netz franchise. Abellio will operate the franchise from 2019 with a number of trains.

On 6 December 2017, the Group increased its stake in WestfalenBahn from 25% to 100%. WestfalenBahn is located in Bielefeld. With its Expresslines Emsland, it connects the cities of Braunschweig and Hannover in Lower Saxony with Bielefeld and Rheine in North Rhine-Westphalia. From Münster there is a direct line via Meppen and Leer to Emden on the North Sea.

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 (€468 million in 2017, €466 million in 2016).

Furthermore, the Group received a sum of €27 million in grants from the State in 2017 through various schemes (2016: €30 million). Of these grants, €27 million (€29 million in 2016) was recognised as 'other revenue' and €0 (€1 million in 2016) was deducted from the related costs.

The following transactions took place with ProRail BV, an enterprise with links to the State:

- The payment of the access charges for the rail infrastructure in the Netherlands. This is explained note 31.
- For the financing of commercial facilities at stations in New Key Projects (*Nieuwe Sleutel Projecten*), the Group has undertaken to pay €1 million to ProRail BV as at 31 December 2017 (€8 million as at 31 December 2016). In 2017, €5 million was paid to ProRail BV (2016: €10 million).

The transactions with the Executive Board and the Supervisory Board members are explained in note 2.

There were no significant transactions in 2017 or 2016 with joint ventures and other participating interests.

The Group has a 5.8% participating interest in EUROFIMA AG. EUROFIMA is a European company that was set up for financing railway rolling stock. It is headquartered in Basel, Switzerland. The following transactions and balance-sheet positions apply for this party.

(in millions of euros)	2017	2016
Interest expenses	-	-

(in millions of euros)	December 31, 2017	December 31, 2016
Private loans	30	59

Group companies

The main companies included in the consolidated financial statements are:

	Percentage interest		Statutory Seat
	2017	2016	
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
NedTrain Ematech 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
Qbuzz BV	-	100.0	Amersfoort
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	100.0	London
Abellio West Midlands Ltd	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	25.0	Bielefeld

* 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.

	Percentage interest		Statutory Seat
	2017	2016	
Joint ventures			
Stationslocaties OG CV	55.8	55.8	Utrecht
Basisfonds Stationslocaties CV	50.9	50.9	Utrecht
Merseyrail Services Holding Company Ltd	50.0	50.0	Hampshire
Northern Rail Holdings Ltd	50.0	50.0	Hampshire
Joint operations			
Stationsdrogisterijen CV	50.0	50.0	Zaandam
Other interests			
Eurofima AG	5.8	5.8	Basel

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 2017

(before profit appropriation)

(in millions of euros)	December 31, 2017	December 31, 2016
Non-current financial assets	3,476	3,511
Total assets	3,476	3,511
Equity		
Share capital	1,012	1,012
Other reserves	2,240	2,287
Result for the period	24	212
	3,476	3,511
Total liabilities	3,476	3,511

Company statement of income 2017

(in millions of euros)

	2017	2016
Other result	-	-
Result of group companies after tax	24	212
Nett result	24	212

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.

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 balance sheet 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)	2017	2016
Balance as at 1 January	3,511	3,309
Share in result	24	212
Dividend distributed for the previous reporting year	-79	-41
Other changes	20	31
Balance as at 31 December	3,476	3,511

Equity

Other reserves

(in millions of euros)	Translation reserve	Hedging reserve	Fair value reserve	Actuarial reserve	Revaluation reserve for associates	General reserve	Total other reserves	Legal reserve development costs
Balance as at 1 January 2016	8	-43	-	17	27	2,049	2,058	121
Movements revaluation reserves	-19	36	-	12	3		32	
Dividend paid						-41	-41	
Result previous year						118	118	
Other movements						-47	-47	46
	-19	36	-	12	3	30	62	46
Balance as at 31 December 2016	-11	-7	-	29	30	2,079	2,120	167
Movements revaluation reserves	-3	3	-	19	2		21	
Dividend paid						-79	-79	
Result previous year						212	212	
Other movements				40		-96	-56	55
	-3	3	-	19	42	37	98	55
Balance as at 31 December 2017	-14	-4	-	48	72	2,116	2,218	222

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.

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 fiscal unity. Consequently NV Nederlandse Spoorwegen is jointly and severally liable for the tax liabilities of the subsidiaries included in the fiscal unity.

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, 28 February 2018

Supervisory Board

Mr. G.J.A. van de Aast
Chairman

Mrs. M.E. van Lier Lels

Mr. J.J.M. Kremers

Mr. P. Rosenmöller

Mrs. J.L. Stuijt

Mr. W.J. van der Feltz

Executive Board

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 & 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

Our conclusions

We have audited the financial statements 2017 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 2017 and of its result and its cash flows for 2017 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 2017 and of its result for 2017 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

We have reviewed the sustainability information for the year 2017 of N.V. Nederlandse Spoorwegen based in Utrecht. The scope is described in section "Our scope". A review engagement is aimed at obtaining limited 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 sustainability; and
- The thereto related events and achievements for the year 2017
- in accordance with the Sustainability Reporting Guidelines version G4 of the Global Reporting Initiative (GRI) and the applied supplemental reporting criteria as disclosed in chapter "Scope and reporting criteria" of the annual report.

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 engagements relating to sustainability reports", which is a specified Dutch Standard that is based on the International Standard on Assurance Engagements (ISAE) 3000, "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information".

Our responsibilities under those standards are further described in the section "Our responsibilities" in this report.

We believe the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Our independence

We are independent of N.V. Nederlandse Spoorwegen in accordance with the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), the "Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence)" and other relevant independence regulations in the Netherlands. This includes that we do not perform any activities that could result in a conflict of interest with our independent assurance engagements. Furthermore, we have complied with the "Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics)".

Our scope

Our engagements scope

The consolidated financial statements comprise:

- The consolidated statement of financial position as at 31 December 2017.
- The following statements for 2017: the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of 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 statement of financial position as at 31 December 2017.
- The company statement of income 2017.
- The notes comprising a summary of the accounting policies applied for the financial statements and other information.

The sustainability information consists of the chapters In brief, 2017 in a nutshell, Foreword by the CEO, The profile of NS, Our strategy, all chapters presented in Activities in the Netherlands and Operations abroad, Our impact on the environment and on society, NS as an employer in the Netherlands, Dialogue with our stakeholders and Scope and reporting criteria in the annual report of the NS.

Limitations to the scope of our review engagement

Unexamined prospective information

The sustainability information includes prospective information, such as ambitions, strategy, plans, expectations, 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.

Unreviewed references to external sources

The references to external sources or websites in the sustainability information are not part of the sustainability information as reviewed by us. We therefore do not provide assurance on this information.

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 error. 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	€40 million (2016: €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 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.

Based on professional judgement, we determined the materiality for specific quantitative information with a bandwidth between 2% and 10%.

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 NS Operaties, NS Commercie & Ontwikkeling, and Abellio. Based on the full scope and specific scope procedures, we have obtained audit assurance on 99% of assets and 92% of revenues. 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.

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 & 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 the previous year, Sale and valuation of real estate and Impact Model Regarding Social Impact have been identified as key matters of our audit. In 2016, NS sold the real estate portfolio, which was held jointly with other investors in a real estate fund, as a result of which the property portfolio of NS has been reduced for a significant part. As a result, this issue is no longer recognized as key matter of our audit. Based on our audit outcomes 2016 and our risk analysis 2017, we no longer recognized the topic Impact Model Regarding Social Impact in 2017 as key matter of our audit.

For the audit of the financial statements we identified the following key audit matter:

Key audit matter	How our audit addressed the matter	Key observations
Revenue recognition		
Revenue of €4.4 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. In order to determine these revenues, management must make assumptions regarding to the allocation to periods, and other conditions as stated in the various concession agreements. 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.	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. 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.	As a result of our procedures we concluded that NS has increased the quality of IT management during 2017 by following-up some of the findings reported by us in previous years. The findings that still require attention and related recommendations have again been brought to the attention. With regard to reliability and continuity of the IT environment we also refer to the paragraph Managing risks included in the NS annual report.
Revenue recognition (continued)		
To a considerable extent, NS depends on its IT infrastructure for the continuity of its business operations, for a large part this relates to the process regarding the revenue recognition. In recent years, NS has invested in the improvement of the IT hardware, — systems and —processes, aimed at increasing the effectiveness of the IT infrastructure and the reliability and continuity of the automated data processing. The disclosures relating to revenue recognition with regard to passenger services are included in notes 1, 28 and 31 of the financial statements.	Our procedures included assessing the developments in the IT infrastructure and testing the internal control measures relevant to our audit, including within the revenue recognition process, with regard to IT systems and processes.	
Tax position and fiscal risks		

The key issues in the tax position relate to the agreements that NS has concluded with the Irish and Dutch Tax Authorities 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.

The valuation of the deferred tax assets depends on the future tax results, which are inherently subject to estimation uncertainties.

We have included tax specialists to our team to, among other procedures, audit the areas of attention within the tax position. We have audited the compliance with agreements between NS and the tax authorities in the context of the transfer of the rolling stock from NS Financial Services to N.S. Lease B.V. in 2017. We also verified the formal transfer of the rolling stock from Ireland to the Netherlands. We have tested the acceptability and adequacy of the recognized (deferred) tax receivables and tax liabilities.

We concur with the accounting treatment of the agreement concluded by NS with the Irish and Dutch tax authorities and the valuation of deferred tax assets.

Tax position and fiscal risks (continued)

The disclosures relating to the tax position and tax risks are included in notes 9 and 10 of the financial statements.

Furthermore we assessed the assumptions underlying the estimates that form the basis for the estimation of the future tax results. We have also discussed this with NS in the light of local tax regulations.

Settlement of claims concerning irregularities in the Limburg tendering process

In 2015, following the tender in Limburg and a complaint received from Veolia, the Netherlands Authority for Consumers and Markets (ACM) launched an investigation. The ACM concluded that NS had violated the Railways Act (Spoorwegwet) in certain aspects in the preparation of the tender in Limburg. ACM concluded that NS had prejudiced Veolia in doing so. In 2017, the ACM imposed a fine of €40.95 million on NS for these violations. NS has recorded the fine and paid it in 2017. NS does not agree with this decision and filed an objection in the fourth quarter of 2017.

The Public Prosecution Service also stated that a number of NS Group companies were deemed to be suspects in this case. On 21 December 2017, the Court handed down a judgment. With regard to none of the alleged offenses, conviction was followed for NS, nor for the other suspects. The Public Prosecution Service has indicated that it will appeal.

We have verified the imposed fine, including the payment of €40.95 million on the basis of source documents. We have determined, based on the conclusions of internal and independent external advisers, that the results of the objection filed by NS are uncertain. Any claims on ACM as a result of the outcome of the objection submitted on this basis do not meet the "virtually certain" criteria that apply on the basis of the applicable accounting principles.

We concur with the accounting treatment of NS and refer to the disclosure of the aforementioned in note 31 of the financial statements.

Key audit matter	How our audit addressed the matter	Key observations
Reliability and continuity of the automated data processing system		
To a considerable extent, NS depends on its IT infrastructure for the continuity of its business operations. 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.	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. 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. We have highlighted the risks and recommendations we have identified and focus on improvements in this area. We refer to the paragraph Managing risks included in the NS Annual Report.	As a result of our procedures we note that NS has increased the quality of IT management during 2017 by following-up some of the findings reported by us in previous years. 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. We also note that NS has further improved information security in recent years.

For the review of the sustainability information, we identified the following key review matter:

Key review matter	How our review addressed the matter	Key observations
Progress and reliability HRN performance indicators		
NS measures the progress in achieving its strategy through the performance indicators related to the main rail network. The progress of these performance indicators also forms an important part of the mid-term review in 2019 and the final evaluation in 2024 regarding the extension of the franchise.	As part of our procedures, we have obtained an understanding in the reporting process (including internal control measures). We furthermore reviewed the consistency with the public definitions in the "Vervoerplan 2017" (Transport Plan 2017) and reconciled these with what was reported by NS to the Ministry of Infrastructure and Water Management.	We deem the disclosures of the performance indicators related to the main rail network to be sufficient.

Key review matter	How our review addressed the matter	Key observations
Progress and reliability HRN performance indicators (continued)		
Given the relevance, we have identified this set of performance indicators as a whole as a key review matter.	We have also taken note of the project that NS is carrying out to improve the reliability of the performance indicators. We have reviewed the disclosures on the performance indicators as included in the section Activities in the Netherlands.	

Other information included in the annual report

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- The Report by the NS Executive Board
- The Report by the Supervisory Board
- Other information pursuant to Part 9 of Book 2 of the Dutch Civil Code

Based on the following procedures performed, we conclude that the other information:

- 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

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 less than the scope of those performed in our audit of the financial statements or in our review of the sustainability information.

Management is responsible for the preparation of the other information, including the NS Executive Board Report in accordance with Part 9 of Book 2 of the Dutch Civil Code and other information pursuant to Part 9 of Book 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements

Engagement

We were engaged by the shareholder as auditor of N.V. Nederlandse Spoorwegen on 3 September 2013, as of the audit for the year 2014 and have operated as statutory auditor ever since that date.

Responsibilities

Responsibilities of management and the supervisory board

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code.

Management is also responsible for the preparation of the sustainability information in accordance with the Sustainability Reporting Guidelines version G4 of the Global Reporting Initiative (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.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the 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 review procedures and the evaluation of the effect of identified misstatements on our conclusion.

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 applicable legal and regulatory requirements.

Amsterdam, 28 February 2018

Ernst & Young Accountants LLP

signed by J. Verhagen

Work performed

We have exercised professional judgment and have maintained professional skepticism throughout the assurance engagements performed by a multi-disciplinary team, in accordance with Dutch Standards on Auditing and the Dutch Standard 3810N, "Assurance engagements relating to sustainability reports", ethical requirements and independence requirements.

Our audit to obtain reasonable assurance about the financial statements included the following:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, 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 the following:

- Performing an external environment analysis and obtaining insight into relevant social themes and issues and the characteristics of the organization
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the sustainability information, including the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made 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 engagement
- Reconciling the relevant financial information with the financial statements
- Identifying areas of the sustainability information where material misstatements, whether due to fraud or error, are likely to arise, and performing further procedures aimed at determining the plausibility of the sustainability information responsive to this risk analysis. These procedures consisted amongst others of:
 - Interviewing management and relevant staff at corporate level responsible for the sustainability strategy, policies and results
 - Interviewing relevant staff responsible for providing the information as disclosed in the sustainability information, carrying out internal control procedures on the data and consolidating the data in the sustainability information
- ◦ Next to the review procedures performed in the Netherlands, visits were performed to Abellio Greater Anglia, Abellio London & Surrey and Abellio ScotRail in the United Kingdom aimed at, on local level, to validate source data and to evaluate the design of internal control and validation procedures
- ◦ Reviewing relevant internal and external documentation, on a limited test basis, in order to determine the reliability of the sustainability information
- ◦ Evaluating whether the estimates made in the impact analysis are reasonable, including the assumptions on which the estimates were based, which are included in the document Impact Analysis Methodology Annual Report 2017 on www.ns.nl/en/about-ns/sustainability/sustainability-at-ns

- 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 Impact Analysis Methodology Annual Report 2017 on www.ns.nl/en/about-ns/sustainability/sustainability-at-ns
 - Evaluating the definitions of the performance indicators for the main rail network in the Transport Plan 2017 as included in the Downloads section at ns.nl/jaarverslag
 - An analytical review of the data and trends submitted for consolidation at corporate level
- Evaluating the presentation, structure and content of the sustainability information as a whole, including the disclosures, in relation to the reporting criteria used.

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 auditor's report and assurance 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)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Balance sheet										
Assets										
Property, plant and equipment	3,845	3,654	3,296	3,157	3,115	3,405	3,433	3,272	3,150	2,844
Investment property	170	197	194	196	169	314	315	309	317	319
Intangible assets	357	257	225	174	125	117	76	64	157	149
Investments recognised using the equity method	26	39	183	185	197	14	14	14	40	33
Other financial assets, including investments	158	267	340	226	205	176	150	146	305	274
Deferred tax assets	259	229	278	295	385	346	392	407	438	455
Total non-current assets	4,815	4,643	4,516	4,233	4,196	4,372	4,380	4,212	4,407	4,074
Inventories	161	139	138	119	109	134	80	95	132	133
Other investments	-	-	270	223	231	279	362	209	150	1,454
Trade and other receivables	648	724	659	499	545	509	680	892	1,245	1,377
Income tax receivables	24	4	32	32	30	11	14	-	34	154
Cash and cash equivalents	565	709	671	775	759	948	534	386	546	571
Assets held for sale	-	140	-	-	-	-	-	-	-	-
Total assets	1,398	1,716	1,770	1,648	1,674	1,881	1,670	1,582	2,107	3,689
Total assets	6,213	6,359	6,286	5,881	5,870	6,253	6,050	5,794	6,514	7,763
Equity and liabilities										
Equity	3,477	3,511	3,309	3,216	3,044	3,168	2,977	2,831	2,871	4,249
Deferred credits	314	328	263	112	122	134	170	213	229	238
Loans and borrowings, including derivatives	551	293	440	867	730	577	180	315	785	839
Employee benefits	30	31	30	33	33	35	31	34	34	34
Provisions	114	100	155	140	182	277	349	175	233	162
Accruals	21	36	55	1	23	39	239	103	29	8
Deferred tax liabilities	59	160	168	169	158	153	136	103	88	66
Total non-current liabilities	1,089	948	1,111	1,322	1,248	1,215	1,105	943	1,398	1,347
Bank overdrafts	-	-	-	-	-	-	-	-	18	42
Loans and borrowings, including derivatives	201	77	488	60	57	48	365	387	292	244
Corporate tax payables	26	7	22	8	8	12	17	7	-	1
Trade and other payables	1,125	1,023	1,060	868	1,003	1,248	784	794	1,210	1,226
Deferred income	246	641	260	372	314	387	754	751	707	639
Provisions	49	37	36	35	196	175	48	81	18	15
Liabilities held for sale	-	115	-	-	-	-	-	-	-	-
Total current liabilities	1,647	1,900	1,866	1,343	1,578	1,870	1,968	2,020	2,245	2,167
Total equity and liabilities	6,213	6,359	6,286	5,881	5,870	6,253	6,050	5,794	6,514	7,763

(in millions of euros)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Consolidated income statement										
Revenue	5,121	5,093	4,973	4,144	3,873	4,638	3,628	3,520	3,271	4,253
Total operating expenses	5,107	4,965	4,876	3,863	3,990	4,284	3,356	3,286	3,121	3,925

(in millions of euros)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Share in result of investees recognises using the equity method	18	142	70	40	47	-	-	-	-	-
Result from operating activities	32	270	167	321	-70	354	272	234	150	328
Net finance result	-5	-9	-23	-35	-26	-25	-12	-22	4	67
Share in result of investees recognises using the equity method	-	-	-	-	-	1	1	1	-	4
Result before income tax	27	261	144	286	-96	330	261	213	154	399
Income tax	-2	-49	-26	-106	53	-67	-50	-53	-37	-118
Result for the period	25	212	118	180	-43	263	211	160	117	281

Acknowledgements

NS Groep NV has its registered office in Utrecht.
Trade register no. 301224358

Visiting address

Laan van Puntenburg 100
3511 ER Utrecht

Concept and realisation

F19 Digital Reporting, Eindhoven

Photography

NS Beeldbank
Albert Koch (HSL-Zuid)

Illustrations

Nico van de Weerd

This report is compliant with 'GRI Standards, option core (assured).'

Copyright

All rights reserved. All applicable copyrights and other (intellectual property) rights relating to all texts, illustrations, software and other materials on this site are the property of NV Nederlandse Spoorwegen and the companies associated with it or are included with the permission of the owner in question.
The annual report is published in both Dutch and English. In the event of any discrepancies between the Dutch and English version, the Dutch version will prevail.

