SNCF RÉSEAU GROUP FINANCIAL REPORT

In € millions 15-17 rue Jean-Philippe Rameau – 93212 La Plaine Saint-Denis Cedex





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MANAGEMENT STATEMENT ON THE FINANCIAL REPORT

This is a free translation into English of the statement issued in the French language and is provided solely for the convenience of English-speaking readers. This statement should be read in conjunction and construed in accordance with French law.

We attest that, to the best of our knowledge, the financial statements have been prepared in accordance with the applicable accounting principles and give a true and fair view of the assets and liabilities and the financial position of the Group as at 31 December 2017 and of the results of its operations for the year then ended, and that the accompanying management report fairly presents the changes in operations, results and financial position of the Group and a description of its main risks and uncertainties.

La Plaine Saint-Denis, 22 February 2018

Patrick JEANTET

Hugues DE NICOLAY

Chairman

Deputy Chief Executive Officer, Finance & Procurement

02 -INTEGRATED MANAGEMENT REPORT ON THE SNCF RÉSEAU CONSOLIDATED FINANCIAL STATEMENTS

IFRS – In € millions



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CHAIRMAN'S LETTER



PATRICK JEANTET

CEO OF SNCF RÉSEAU AND DEPUTY CHAIRMAN OF THE SNCF BOARD OF DIRECTORS

OUR GOAL: TO BUILD TOMORROW'S RAIL NETWORK WITH ALL SNCF RÉSEAU EMPLOYEES AND PARTNERS

We successfully completed numerous projects in 2017 – some will stay etched in our memory – and we had to face some hurdles. Safety remains SNCF Réseau's top priority and the commitment we renewed in July 2016 has yielded success: noticeable safety incidents have declined by -25% in two years.

In 2017, SNCF Réseau carried out over 1,600 rail network upgrades, an outstanding number. Among the main projects were the commissioning of the Network Operations Centralised Commands at the Gare de Lyon and Saint-Denis stations, the inauguration of the T11 tramway in Ile-de-France, not to mention the new lines: Tours-Bordeaux (SEA), Le Mans-Rennes (BPL) and the Nîmes-Montpellier bypass. This is great news for passengers, regional attractiveness and the railway industry in general, and we can take pride in this achievement. I cannot ignore the incidents at Vanves in late July and Montparnasse station on 3 December, which had very serious repercussions for our customers and our image! This event shows just how much we need to speed up the transformation of our operating procedures. The "Robustness" report that we ordered with Guillaume PEPY at the start of the summer has become extremely topical. We have therefore defined two major action plans: H00 to improve network robustness and FIRST to inform passengers in the event of disruptions. The first results are expected in early 2018.

2017 will be remembered as a year of substantial network investment: we spent a record €5.4 billion to renew 1,000 km of track, inspect 4,000 km of catenaries and replace 500 switches. SNCF met its commitments in this first year of the multi-year performance contract. This achievement confirms the trajectory.

In keeping with the renewal programme, SNCF Réseau is coordinating a cluster of projects in order to create a "smart" and "broadband" network. Meeting our customers' travel needs and managing capacity restrictions generated by engineering works and network maintenance do not go handin-hand at first glance. Yet these are the challenges we face to better manage traffic and train path production. And let us not forget our contribution to improving passenger information using state-of-the-art tools.

In addition to renewal work and the transition towards new rail operating technologies, SNCF Réseau forged numerous "winwin" partnerships with industrial companies in 2017, for example:

- The supply of 108 metres of track by British Steel (formerly Tata Steel) for €800 million over 7 years. This "win-win" contract provides British Steel with a long-term vision of its market and justifies the employment of 450 persons at Hayange, the last rail construction site in France. For SNCF Réseau, this partnership will generate economies of scale and stimulate innovation. The Hayange plant is on the cutting edge of steel thermal treatment and produces some of the most resistant and high-performance long rails in the world.

- The renewal of 180 km of catenaries on the RER C line, from the south of Bibliothèque François-Mitterrand station to the south of Brétigny station. In February 2017, SNCF Réseau awarded this designbuild contract to a group steered by TSO Caténaires. SNCF Réseau has given these companies the leeway they require to develop the most suitable tools and methods for the specificities of this project, which will run from 2017 to 2024. One of the major challenges involves the development of new vehicles that can install and remove 1.4 kilometres of catenary wire in a single night, without disrupting traffic in the morning. SNCF Réseau is also counting on several innovations for catenary infrastructures (posts, foundations) that should be designed to absorb the significantly greater stresses on frequency and intensity.
- The development and roll-out of the future generation of Computerised Switching Stations ("NG3 CSS"). To renew technologies and optimise the full cost of a CSS, SNCF Réseau launched an "innovation partnership" with five companies from the railway signalling sector in the spring of 2017. The partnership will be divided into several R&D phases, with the possibility of acquiring one or more solutions that could be rolled out on the network starting in 2023.
- To piggyback projects, "all-in-one track removal units" combine various machines (ballast-clearing machine, track renewal train, ballast tamper, ballast regulator and dynamic track stabiliser) in a precise sequencing and at a certain speed to replace 800 to 1,000 metres of track daily.

To meet these challenges, the company continued to hire extensively in 2017, with 2,800 new employees:

- 2,000 young graduates or experienced technicians from BEP, CAP, Bac Bac+3¹ technological courses.
- 800 recent or experienced graduates from engineering schools or scientific courses (Bac+5²) for management positions.

These hirings involved three major profession's categories: rail infrastructure maintenance and engineering works (75%), traffic management and operations (20%) and project engineering and management (5%).

In addition to direct employment, the network renewal programme has a positive impact: a €1 million investment creates 10 jobs within partner companies.

Finally, our preparation for the future opening of the Passenger market to competition stepped up in 2017. This forms part of a European project and therefore it is governed by both the French and European authorities. As infrastructure manager, SNCF Réseau is doing as much advance work as possible for this new situation. The company views this as an opportunity to create a "virtuous circle" to further develop the French rail system.

The arrival of new operators alongside SNCF Mobilités should boost network usage, by allocating train paths that are

¹ BEP: French Certificate of Vocational Proficiency, CAP: French Professional Aptitude Certificate, BAC: French high-school diploma,

BAC + 3: BAC + 3 year university degree

 $^{^{2}}$ BAC + 5: BAC + 5 year university degree

currently unused for instance. The expected increase in traffic would automatically raise the infrastructure fees collected by SNCF Réseau, representing new resources to finance the modernisation of its infrastructure.

I will conclude with the launch of the SNCF Réseau transformation at the end of 2017. I sought a new "2030 NOUVEL'R" strategic plan in order to boost the number of network trains and meet the needs of our customers, who can reach their destinations on time.

Our network is extensive, diverse and not sufficiently used. With 30,000 km of track, including 2,600 high-speed lines, converging towards Paris, the region accounts for 40% of daily traffic. There is little traffic on average: 50 trains/line/day compared to 70 in Germany and 150 in Switzerland. However, we have to implement specific management procedures in dense zones to avoid saturations that can occur in hubs like Paris, Lyon, Marseille, Lille or Strasbourg. Trains do not take up much space, emit low levels of pollutants and greenhouse gases, and improve the areas where they operate: they promote regional attractiveness. Rail transport is efficient if its assets are used to their full potential. We have substantial fixed and operating costs compared to our competitors (air and road transport). The challenge is therefore not to expand the network but bolster its performance, boost its capacities and adapt it to dense zones to fully use the natural potential that it offers society in accordance with the challenges of the Paris Agreement on Climate Change.

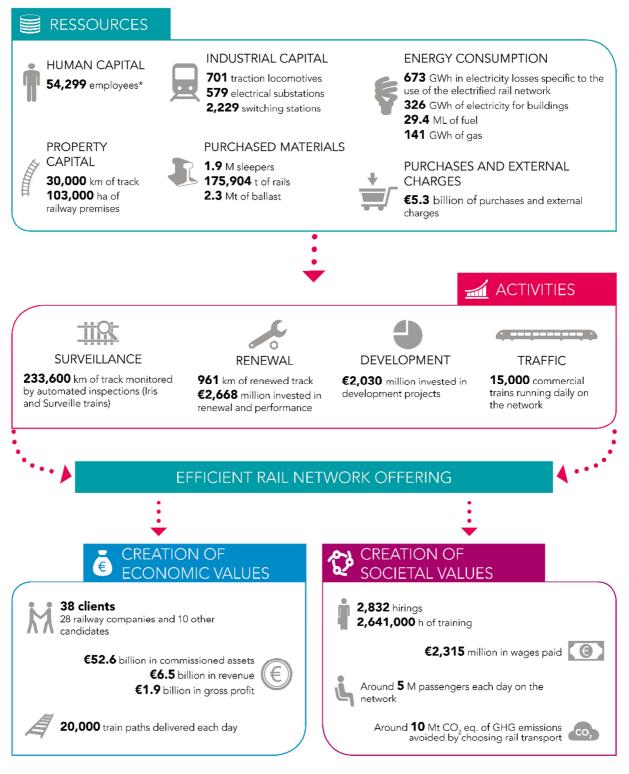
To transform the company for better service quality and meet customer requirements, several targets must be reached: augment the offering and service quality of the current network based on:

- A more modernised and therefore reliable network: it must first be upgraded in areas where rail transport is most relevant;
- A modernisation that also involves more efficient use of the infrastructures;
- A boosted traffic capacity on network sections that encounter traffic incidents;
- Efficient services tailored to the requirements of each kind of customer.

To fulfil these objectives, SNCF Réseau is committed to a corporate social responsibility policy designed to meet future environmental and societal challenges, based on four priorities: rail system safety, ecological footprint, social performance and regional involvement. I genuinely believe that, while focusing on our stakeholders, we contribute to the collective issues of our time, which is one of the company's ultimate purposes.

SNCF Réseau will take on these challenges.

2017 SNCF RESEAU BUSINESS MODEL



* Actual number of employees

Figures provided for illustration, non-exhaustive data

1 SNCF RÉSEAU IN 2017

1.1 PRESENTATION OF THE ACTIVITY

SNCF Réseau manages, maintains, develops and markets the services offered by the French National Rail Network. It manages safety and performance for nearly 30,000 km of rail lines, of which 2,600 high-speed lines. It also manages customer access to the network and service infrastructures under transparent and non-discriminatory conditions: 28

railway undertakings run on the Network and 10 other companies, known as authorised candidates (combined transport operators, ports, etc.), order train paths which they then assign to the rail company of their choice.

SNCF Réseau is organised according to four business lines and an Ile-de-France (Greater Paris) Executive Management Department:

SNCF RÉSEAU

MAINTENANCE & WORKS	TRAFFIC	ENGINEERING & PROJECTS	NETWORK ACCESS
Network maintenance, operational security	Rail traffic management	Delegated project ownership, project management and site logistics engineering services, in France and abroad	Network access management in accordance with the key functions

Ile-de-France Executive Management combines the four business lines under the authority of a General Director in order to respond to the specificities of this high-density rail zone.

There are also ten regional departments which report directly to the Chairman. Within their respective regions, they oversee the company's institutional representation in dealing with local partners, and particularly the transport organising authorities, under the management of Deputy General Directors.

SNCF Réseau acts as the intermediary between the transport Organising Authorities and the French State for all the regional and national rail network development projects that it undertakes and leads.

In addition, its subsidiaries are involved in the following activities:

- SFERIS, a company that carries out project works in France and provides expertise, 100% owned by SNCF Réseau;
- EURAILSCOUT BV, an on-board track inspection and analysis company, 50% owned by SNCF Réseau;
- CDG Express Etudes, a rail link project in France, between
 Paris-Est station in Paris and Paris-Charles-de-Gaulle
 Airport, consolidated pursuant to the rules applicable to "Joint Operations" (IFRS 11);
- Altametris, a company created on 7 March 2017, specialising in the collection, processing and optimisation of data using automated mobile devices, 100% owned by SNCF Réseau.

1.2 CORPORATE STRATEGY

At the end of September, the Chairman Patrick Jeantet announced his plans to define a new strategy to build tomorrow's leading rail system in keeping with the priority given to daily transport: "we want more trains." Based on a dual approach to transform the company, it aims to improve service quality, secure engineering works, provide SNCF Réseau with a more pivotal role in rail system operations and satisfy the expectations of both customers and employees.

Pending this new strategy, the primary commitments remain as follows:

- strengthen the fundamentals of industrial and social excellence;
- initiate a transformation to support the industrial and economic performance;
- and develop cooperation within SNCF Réseau, the Public Rail Group and stakeholders.

1.3 HIGHLIGHTS

1.3.1 Signing of the multi-year performance contract

On 18 April 2017, the SNCF Réseau Board of directors approved the signing of the multi-year performance contract with the French State. This contract, which provides for investments amounting to ξ 46 billion over ten years, was then signed with the French State on 20 April 2017.

This contract introduces a new visibility over the company's investments, resulting in network upgrades and renewals to maintain a high level of safety and service quality.

Under the multi-year contract, SNCF Réseau pledges to roll out and fulfil a performance plan with the following targets:

- €0.5 billion in productivity for investments and operating expenses by the end of 2021;
- €1.2 billion in productivity for investments and operating expenses by the end of 2026;

The gradually deployed plan focuses on the following performance levers:

- Productivity gain driven by higher renewal volume and the implementation of industrial efficiency levers (technological innovation, process reengineering, project value analysis, extension of night work shifts);
- Reinvesting of productivity gains in network maintenance;
- Reduction in maintenance costs as from 2021, as a result of network renewal investments;
- Optimisation of commercial expenses (constant improvement in service quality).

- Reduction in general and administrative costs.

1.3.2 Golden rule

Decree 2017-443 of 30 March 2017, specifying SNCF Réseau's investment financing rules, was published in the *Journal Officiel* (French Official Journal) of 31 March 2017.

The "Golden rule" ratio is defined as the ratio of net debt (period-end repayment amount) to IFRS gross profit for the period.

SNCF Réseau may no longer finance development investment when this ratio exceeds 18.

The ratio is calculated yearly when the annual consolidated financial statements are approved by the Board of directors.

Based on the 2016 annual accounts, the SNCF Réseau Board of directors' meeting of 18 April 2017 noted that the ratio was 22.24, thus exceeding the threshold of 18. As at 31 December 2017, the ratio had increased slightly to 23.85 as the improvement in gross profit (+€29 million) did not offset the rise in the net debt repayment amount (+€3,236 million).

1.3.3 Transformation of SNCF Réseau

SNCF Réseau faces six challenges:

- Overhaul first and foremost the network with the most traffic in keeping with its long-term industrial asset management strategy
- Boost **the capacity and solidity** of saturated or potentially saturated lines and hubs;
- Speed up the modernisation of operating and signalling systems for greater efficiency and capacity;
- Improve safety;
- Roll out a **commercial policy** that promotes the use of the rail network;
- Assist the company's **employees** with these new challenges so that they may feature among the world's top rail experts.

1.3.4 Creation of the ALTAMETRIS subsidiary

On 7 March 2017, SNCF Réseau created Altametris, a subsidiary dedicated to drone solutions.

SNCF Réseau has been acquiring the expertise necessary to develop IT solutions for maintenance and safety drones for the past 10 years, working closely with researchers, manufacturers, start-ups and the *Direction Générale de l'Aviation Civile* (DGAC or French Directorate General of Civil Aviation). SNCF has been a member of the *Conseil pour les Drones Civils* (French Council for Civil Drones) since its creation.

Altametris offers services to SNCF group's various business lines as well as other infrastructure managers:

- Data collection by automated mobile devices such as drones and robots;
- 3D plans and models, necessary for any infrastructure modernisation or renewal project;
- Infrastructure monitoring through the identification of components and their condition and changes over time, with a specialisation in industrial and line infrastructures;

 Decision-making support; aerial data from a variety of sources (photography, infra-red, laser, etc.) offers an original view of events, facilitating decisionmaking.

1.4 FINANCIAL AND NON-FINANCIAL KEY FIGURES

			Change		
In € millions	millions 2017 2016		In € millions	In %	
Revenue	6,496	6,441	55	1%	
Gross profit	1,897	1,868	29	2%	
Operating profit	1,100	1,016	84	8%	
Finance cost	-1,172	-1,173	1	0%	
Net profit/(loss) before tax	-72	-157	85	-54%	
Net profit/(loss) for the year attributable to equity holders of					
the parent	-201	-120	-81	68%	
Investments	5,378	5,244	134	3%	
Net debt repayment amount - Excluding accrued interest					
receivable	45,243	42,007	3,236	8%	
Average number of full-time equivalent (FTE) employees	54,405	54,028	377	1%	

The Group discloses, internally and externally, a recurring net profit/(loss) for the year attributable to equity holders of the parent based on net profit/(loss) for the year attributable to equity holders of the parent adjusted for:

- impairment losses;
- transactions generating a P&L impact that is individually greater than €50 million in terms of absolute value and generally included in and/or allocated between "Fair value remeasurement of the previously held interest" and "Net proceeds from asset disposals";
- the Group's share in these various items recorded in companies accounted for under the equity method and included in "Share of net profit/(loss) of companies consolidated under the equity method";
- change in fair value of financial instruments included in "Net borrowing and other costs", when it exceeds €50 million in terms of absolute value;
- specific transactions involving financial instruments (restructuring, renegotiations or other) generating impacts exceeding €50 million in terms of absolute value on net borrowing costs;
- change in deferred tax assets recognised for SNCF tax consolidation entities in "Income tax expense";
- share of minority interests with regard to these various items and included in "Net profit/(loss) attributable to non-controlling interests (minority interests)".

This indicator better reflects net profit/(loss) for the year attributable to equity holders of the parent relating to the Group's recurring performance. It was calculated as follows at the year-end:

In € millions	2017	2016
Net profit/(loss) for the year	-201	-120

attributable to equity holders of the parent		
Included in "Net borrowing and other costs" (specific financial instrument transactions)	-85	
Included in "Income tax expense"	129	-37
Recurring net profit/(loss) for the year attributable to equity holders of the parent	-157	-157

	2017	2016	Chang	ge
Total number of hirings – excluding subsidiaries	2,832	3,086	-254	-8%
Percentage of women in total workforce (%)	13	12	1	4%
Number of noticeable safety incidents (SSI)	140	152	-12	-8%
Weighted number of fatalities and serious injuries per million km.train (CSI)	0.208	0.182	0.026	14%
Frequency index of work accidents with lost time excluding commuting (%)**	9.78	11.22	-1	-13%
Total greenhouse gas emissions of SNCF Réseau (scope 1+2) (kt eq CO ₂) ***	170	176	-6	-3%
Tonnes of CO ₂ avoided thanks to the rail system (kt eq CO ₂)***	9,872	9,872	0	0%

** For 2017: Value on a rolling 12-month basis at the end of October 2017
*** Mandatory publication of the Greenhouse Gas Emissions Report every 3 years (article 75, Grenelle II law)

2 GROUP RESULTS AND FINANCIAL POSITION

2.1 CASH FLOW STATEMENT

In € millions	2017	2016	Change
Cash from operations before finance costs and taxes	1,894	1,869	25
Impact of change in working capital requirement	-80	372	-452
Taxes paid (collected)	1	15	-14
Cash flow from operating activities	1,815	2,256	-441
Purchases of intangible assets and property, plant and equipment	-5,180	-5,231	51
Disposals of intangible assets and property, plant and equipment	94	95	-2
Changes in loans and advances	-249	-	-249
Investment grants received	2,350	1,617	733
Cash flow used in investing activities	-2,985	-3,518	533
Issue of debt instruments	4,878	4,741	137
Repayments of borrowings	-1,386	-1,758	372
Payments relating to PPP payables	-63	-	-63
Receipts relating to PPP receivables	63	-	63
Net borrowing costs paid	-1,165	-1,148	-17
Increase/(decrease) in cash borrowings	-1,026	157	-1,183
Cash flow from financing activities	1,301	1,992	-691
Increase/(decrease) in cash and cash equivalents	131	725	-594
Opening cash and cash equivalents	3,172	2,447	725
Closing cash and cash equivalents	3,303	3,172	131

2.2 GENERAL OBSERVATIONS ON 2017 GROUP RESULTS

			Change	
In € millions	2017	2016	In € million s	In %
Infrastructure fees	5,820	5,778	42	1%
Freight compensation	62	78	-16	-21%
Other income	615	585	30	5%
REVENUE	6,496	6,441	55	1%
Purchases and external charges	-2,072	-2,071	-1	0%
Employee benefit expense	-2,315	-2,285	-30	1%
Taxes and duties other than income tax	-211	-216	5	-2%
GROSS PROFIT	1,897	1,868	29	2%
GROSS PROFIT / REVENUE	29%	29%	0 pt	n.a.
Depreciation and amortisation	-986	-829	-157	19%
Movement in provisions and asset impairment	113	-90	204	n.a
Net proceeds from asset disposals	74	66	8	12%
OPERATING PROFIT	1,100	1,016	84	8%
FINANCE COST	-1,172	-1,173	1	0%
NET PROFIT/(LOSS) BEFORE TAX	-72	-157	85	-54%
Corporate income tax	-129	37	-166	-450%
NET PROFIT/(LOSS) FOR THE YEAR	-201	-120	-81	68%
NET PROFIT/(LOSS) BEFORE TAX / REVENUE	-1%	-2%	-3 pt	n.a.

2.2.1 Revenue

Revenue increased by 1% or +€55 million compared to 31 December 2016.

Infrastructure fees (90% of revenue) rose by +€42 million. Adjusted for the negative repercussions of strikes and the impact of the 2016 leap year (+€61 million), fees declined by -€18 million, mainly due to the traffic mix effect. In addition, the positive impact due to the commissioning of the second phase of the Eastern high-speed line for +€24 million and new high-speed lines (BPL and SEA) for +€26 million was totally absorbed by the negative fee scale price effect of -€48 million. The -€16 million decrease in Freight compensation was primarily due to the 2017 review of the directly attributable cost (from \pounds 2.85 to \pounds 2.75 per train.km) paid by the French State.

Finally, other income increased by $+ \notin 30$ million. The $\notin 13$ million decline in business following the end of raw material sales to private service providers under PPPs for the construction of high-speed lines was fully offset, mainly by the increase in services carried out for the PRG.

2017/2016		Change in traffic (TKM)		
activities	Railway undertakings	Gross TKM	Adjusted TKM*	
	High-speed transport	-1.4%	-2.7%	
	Mainlines	-1.4%	-4.6%	
	Transport Express Régional	6.3%	3.8%	
	Transilien	4.1%	1.2%	
PASSENGERS		2.8%	0.6%	
	SNCF Freight	-4.4%	-7.6%	
	Alternative rail freight companies	5.9%	6.3%	
FREIGHT		-0.2%	-2.1%	
	Other	-11.5%	-11.5%	
TOTAL		2.3%	0.2%	

* Adjusted TKM: adjusted for 2016 economic impacts.

2.2.2 Gross profit and operating profit

Gross profit increased by €29 million compared to 31 December 2016, due to the +€55 million improvement in revenue and the €26 million rise in operating expenses.

Purchases and external charges remained stable due to performance initiatives (€47 million) which offset the rising volumes and curbed prices. The €30 million increase in employee benefit expense was primarily due to a negative price impact on total payroll following the rise in the T2 pension rate (€22 million).

As at 31 December 2017, current operating profit improved by €84 million compared to 31 December 2016, amounting to +€1,100 million. The surge in provisions (+€204 million) was marked by the favourable outcome of the litigation involving floods in Arles in 2003 (+€119 million).

2.2.3 Finance cost

In € millions	2017	2016	Cha	ange
Net borrowing costs	-1,480	-1,417	-62	4%
Other financial income and expenses	85	-7	82	-1390%
Change in fair value of liabilities and derivatives	11	11	0	-1%
Capitalisation of borrowing costs	240	277	-37	-13%
Employee benefit expense	22	4	19	525%
FINANCE COST	-1,172	-1,173	1	0%

Finance cost stood at -€1,172 million, an improvement of +€1 million compared to December 2016. The decrease was primarily attributable to non-recurring income arising from the switch to bilateral margin calls on hedging financial instruments (+€85 million) that offset the €(63) million rise in net borrowing costs. This increase was attributable to the €113 million rise in net debt that was partly offset by the lower rates enjoyed by SNCF Réseau in 2017 (+€50 million).

2.2.4 Net profit/(loss) after tax

The net loss after tax totalled €200 million following a tax expense of €128 million, compared to a net loss after tax of €120 million and a tax income of +€37 million in 2016.

The 2017 deferred tax expense was largely due to the fall in the corporate income tax rate voted under the 2018 French Finance Act.

2.3 INVESTMENTS

2017	2017	Change	
2017	2010 -	ln €	In %
1,212	1,205	7	1%
675	957	-282	-29%
818	546	272	50%
246	246	0	0%
2,668	2,785	-117	-4%
129	126	3	3%
5,075	4,908	167	3%
303	335	-32	-10%
5,378	5,244	134	3%
	675 818 246 2,668 129 5,075 303	1,212 1,205 675 957 818 546 246 246 2,668 2,785 129 126 5,075 4,908 303 335	2017 2016 In € 1,212 1,205 7 675 957 -282 818 546 272 246 246 0 2,668 2,785 -117 129 126 3 5,075 4,908 167 303 335 -32

Investments are presented as total expenditure, capitalised and non-capitalised, less finance costs.

The following table summarises the total expenditure reconciliation with the statutory accounts:

In € millions	2017	2016	Change
TOTAL ASSET ACQUISITIONS	5,409	5,087	322
IAS 23 - Capitalised borrowing costs	-278	-345	67
Share of the SEA concession financed by third parties	0	208	-208
Project costs and Other	247	294	-47
TOTAL EXPENDITURE	5,378	5,244	134

Total investment expenditure represented €5,378 million, up by €134 million compared to 2016 (€5,244 million). This increase breaks down into the production phase of the Eole project for +€315 million, the ramp-up of regional development projects for +€272 million, the continuation of renewal activities for -€42 million, excluding the GSM-R commissioning in March 2016 for -€74 million, and the decline in expenses incurred in development projects under PPPs for - €282 million.

The network's renovation and modernisation (in a bid to combat ageing infrastructures) confirmed in the performance contract between the French State and SNCF Réseau is continuing at a steady pace.

2.3.1 Renewal and performance investments

The 2017 renewal programme demonstrates the company's determination to continue investing to upgrade the primary network, which has the greatest traffic volume.

Production stood at €2,668 million in 2017, i.e. a 4% decrease (-€117 million) compared to 2016, primarily due to Telecom activity (-€92 million) following the GSM-R commissioning in 2016. Other activities revealed mixed trends, particularly track and electric traction (catenaries) in line with the network upgrade and modernisation strategy.

The **renovation of track** and points and crossings for the primary network (Vigirail plan) remained intense, in line with the numerous scheduled Equivalent Planned Large Operations (upgraded track km equivalent) and points and crossings engineering works compared to 2016:

In physical units	2017	2016	Change
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Equivalent Planned Large				
Operations	961	1,067	-106	-10%
Of which Ile-de-France	244	214	30	14%
Number of points and crossings (*)	492	463	29	6%
Of which Ile-de-France	171	172	-1	-1%
*Evoluting high speed lines				

*Excluding high-speed lines

Overall, project completion in 2017 was on schedule. The -€83 million (-5%) decline year-on-year in track renewal investments was mostly due to the very high production levels in 2016. The budgeted decline in physical track production by -10% compared to 2016 gave rise to 961 Equivalent Planned Large Operations, compared to 1,067 in 2016. Conversely, points and crossings replacements rose by +6% in line with the Vigirail plan: 492 points and crossings were replaced.

Priority was given to Ile-de-France which represented 28% of track investments in 2017, up 19% following the implementation of the "Dense Zone" all-in-one track removal unit is made up of 3 to 6 heavy engines (works trains) for track upgrades. As an addition to this apparatus, and in a bid to fully renew all track components, a BOA3 train was used to replace 46.3 km of track across Ile-de-France.

In other regions, rapid-response trains were used slightly more (+3%) than in 2016, in line with the annual scheduling.

The **main projects** in 2017 involved the Culmont-Barisey (89 km), Givors-Peyraud (75 km), Sens-Saint Florentin (71 km), Moret-Montargis (58 km), Neuvy sur Loire-Nevers (51 km), Champtocé-Nantes (45 km), Gevrey-Sennecey (40 km), Carcassonne-Castelnaudary (33 km), Amiens-Tergnier (22 km), and Argenteuil-Bobigny (16 km) railway segments. Major engineering work was carried out on the South-Eastern (ballast renewal), Northern (ballast and track renewal), Atlantic (track renewal and replacement of tracks and crossings) and Mediterranean (replacement of expansion joints) high-speed lines. Finally, 34 points and crossings were renewed at Lyon-Perrache station in early 2017.

The unit track renewal costs increased due to:

- A budgeted decrease in production volume despite a greater proportion of rapid-response renewal work (615 km vs. 535 km in 2016). Rapid-response operations are more costly but help to reduce the capacity footprint by restoring rail traffic more quickly.
- A 2017 roll-out of production in Ile-de-France under difficult working conditions (dense zones, night work, maintenance of traffic on adjoining tracks during project work, etc.).
- Signalling investments increased compared to 2016 (+€18 million or +6%). Several operations were commissioned in Île de France, particularly, the railway control towers at Paris-Gare de Lyon and Paris-Aulnay-Roissy-Mitry (RER B) stations for the remote control and monitoring of switching stations under the Network Operations Centralised Command programme and the new Vitry/Les Ardoines switching station on the RER C line. Major engineering work was also carried out in Rennes, Creil, Macon, Belfort and Toulouse.
- Electric traction activity involving the modernisation of catenaries was more intense than in 2016 (+€63 million or +57%) with significant operations in the second half of 2017. SNCF Réseau also began overhauling the RER C catenary through an industrial design-build partnership, work continued on the RER B line and there will now be substantial investments in the Montréjeau-Tarbes rail segment until 2019 (modernisation of the catenary which dates back to the 1920s).
- Expenditure for engineering works (bridges, tunnels) and foundational components (embankments) rose by +12%

compared to 2016. In Ile-de-France, the main projects involved the start of renovations of the Marly le Roi viaduct on line L and the Grands Augustins trench on the RER C line in Ile-de-France, and the replacement of the Reisses and Vigny bridges on the Chambéry-Modane line, phase II of the repairs on the Pissy-Pôville tunnels (Paris-Le Havre line) and the beginning of repairs on the Combeau and Saint Sulpice tunnels (POLT line) in the regions.

- Telecom activity declined compared to 2016 (-€92 million or -40%) in line with the commissioning of the GSM-R (Global System Mobiles – Railways) project in March 2016 (-€74 million) involving secure voice and data communication between various ground-to-train rail teams. Furthermore, the deployment of fiber optics across the rail network continued with 1,200 additional km, i.e. a network of 5,700 km to satisfy rail transport communication and security requirements (flows from SNCF Réseau signalling and control command industrial applications). Any excess capacity is sold.
- Station hall and platform development expenses declined by €4 million 2017 year-on-year. Work on the main passenger hall at Saint-Jean station in Bordeaux for the arrival of the high-speed line was completed in the first half of 2017. In addition, work at Paris – Austerlitz station was initiated at the end of 2017.
- Other renewal expenditure decreased by €39 million compared to 2016. It concerns major repairs, specific investments to improve punctuality, primarily in Ile-de-France or commercial investment projects for the Freight activity.
- Industrial investments rose by €36 million (+13%), excluding asset transfers, for €68 million in 2016. They mainly involved machinery, fixed installations, rolling stock, monitoring and maintenance equipment and IT projects.

2.3.2 Network compliance upgrades

Network compliance upgrade falls within the priority given by the company to specific safety and accessibility operations. 2017 production is consistent with 2016.

- Safety investments totalled €120 million in 2017, up €27 million compared to 2016. These investments mainly involved the removal of level crossings or adjustments to improve safety at level crossings, the removal or adjustment of pedestrian track crossings, set-up of fencing to prevent intrusions on railway premises, infrastructure safety, rail tunnel security and the installation of train speed control equipment using transponders. In 2017, SNCF Réseau removed 5 level crossings listed in the national safety plan and 11 pedestrian track crossings.
- Accessibility investments totalled €100 million in 2017 for compliance upgrade and €42 million for regional development projects, up €11 million compared to 2016. The main accessibility operations primarily involved the adjustment of lifts and wheelchair ramps for Persons with Reduced Mobility (PMR). These investments fall within the scope of the Programmed Accessibility Agenda master plans (national and regional) adopted in 2015 and 2016, which provided for accessibility work at around 740 priority stations for nearly €3 billion by 2025, of which more than €800 million for national stations. In Ile-de-France, under the master plan concluded with Ile-de-France Mobilités (formerly STIF), production was on track, with actual costs of €85 million in 2017 compared to €92 million in 2016 and the adoption of the second financing agreement (€697 million) to complete the programme. In other regions, production totalled €57 million in 2017, compared to €39 million in 2016

The main accessibility operations in 2017 covered Reduced Mobility Programmes (RMP) such as the five stations in Ile-de-France declared as accessible in 2017: Chaville Rive Gauche, Combs la Ville – Quincy, Saint-Leu-la-Forêt, Les Vallées and Saint-Ouen and the following regional stations: Vichy, Lorient, Serqueux, and Colomiers Lycée international.

2.3.3 Network development

Network investment and development expenses increased by +€279 million compared to 2016, primarily due to new major high-speed line projects, the ramp-up of the Eole project in Ile-de-France and other regional projects.

- Major projects under PPPs -€282 million / -29%

In 2017, production arising from projects under PPPs totalled ${\notin}675$ million:

- The Southern Europe Atlantic (SEA) high-speed line extension project between Tours and Bordeaux was completed with 302 kilometres of new track, for which production in 2017 amounted to €86 million; it came into service on 2 July 2017 following the technical test period;
- The LGV Brittany-Loire (BPL) high-speed line extension project between Le Mans and Rennes was completed with 182 kilometres of new track, for which production in the first half of 2017 amounted to €343 million; it came into service on 2 July 2017 following the technical test period;
- Investments earmarked for the Nîmes -Montpellier bypass project totalled €246 million in 2017. Following its delivery in November 2017, the new 80 km line came into service in December 2017 for freight traffic. It should come into service in July 2018 for passenger traffic; Montpellier Sud station should be completed at the same time.

- Major projects in progress +€268 million / +128%

Expenditure for Major Projects in Progress stood at \notin 499 million in 2017. This category mainly comprises the Eole project for \notin 469 million in 2017.

The Eole project, declared to be of public interest in January 2013, and currently in progress, consists in extending the RER E line westwards with the modernisation and renovation of 47 kilometres of existing track and 10 current stations, and the creation of a new 8 km underground rail link between Haussmann Saint-Lazare and Nanterre la Folie comprising three new stations at Porte Maillot, CNIT la Défense and Nanterre la Folie. The investment stands at €3.8 billion (excluding rolling stock). This will be a fast, innovative and interconnected line to offer improved service quality to daily passengers. A new operating system, NExTEO®, will boost the number of trains per hour (22 trains in 2024, with a possible 28 trains in the long term), due to its mobile block signalling and monitoring system (driver assistance). The interval between two trains could therefore be reduced to 108 seconds at a maximum speed of 120 km/h on the central segment. The section from Saint Lazare to Nanterre should be commissioned in 2022 and its extension to Mantes-la-Jolie in 2024.

- Major projects in the upstream phase +€0 million / +0%

The studies relating to future major projects were ranked in order of importance based on the priorities established by the Mobilité 21 Commission. They will be reviewed by the *Conseil d'Orientation des Infrastructures* (French Infrastructure Guidance Board) set up in connection with the *Assises de la Mobilité* (French National Conference on Mobility). The decisions made by the French State will determine the launch and progress of these real estate studies/acquisitions. In 2017,

the actual cost stood at €38 million, equivalent to 2016 and primarily involved the Major South-West Projects programme, the new Paris-Normandy line and the new Provence-Côte d'Azur (SE France) line.

- Regional development projects +€272 million / +50%

These projects mainly involve State-Region contracts from 2015 to 2020, including the modernisation of UIC lines 7 to 9 and capillary freight investments, with a ramp-up. Total expenditure stood at €818 million in 2017.

Several lines came into service in 2017 such as the modernised Guingamp-Paimpol line in April 2017, the Tangentielle Nord line (Tram 11 Express) from Epinay-sur-Seine to Bourget in July 2017, the renewed Brest-Quimper, Le Puy-Firminy, Paray-le-Monial-Chauffaille, Montdauphin-Guillestre-Briançon and Cannes-Grasse lines in December 2017.

The studies on the CDG Express direct rail link (32 km - 20 minutes) between Paris and Roissy Charles de Gaulle Airport are ongoing. Work is scheduled to begin in 2018. At the French government's request and following the approval of the Board of directors, SNCF Réseau will prefinance this study phase.

Other major operations will continue in 2018, such as the reopening of the Belfort Delle line, the construction of the cross-border Cornavin-Eaux-Vives-Annemasse (CEVA) line between Switzerland and France, and the modernisation of the Bordeaux-Hendaye lines as well as Nice, Rennes, and Lyon Part-Dieu stations.

In Ile-de-France, the main ongoing projects are the interconnections with the Grand Paris Express network, adjustments required by the arrival of new Transilien rolling stock and tram-train projects (extension of T4 to Clichy-Montfermeil and the Tangentielle Ouest T13 project between Saint Cyr and Saint Germain en Laye).

2.4 NET BORROWINGS AND FINANCING

2.4.1 Financing and investment management

- Security and diversity of financing

Under its financial strategy, SNCF Réseau must at all times have the necessary financial resources to fund its current operations and investments.

In addition to its own resources and the public funding it receives, SNCF Réseau secures most of its financing through organised debt markets or over-the-counter transactions.

SNCF Réseau has several financing programs with varying maturities:

- Euro Medium Term Note (EMTN) Programme for a maximum amount of €50 billion;
- Euro Commercial Paper (ECP) Programme for a maximum amount of €5 billion;
- Negotiable European Commercial Paper³ (NEU CP) Programme for a maximum amount of €3 billion.

In July 2015, SNCF Réseau became one of the issuers whose debt can be purchased by the European Central Bank under the Public Sector Purchase Program.

The credit quality and market visibility of SNCF Réseau is backed by its EPIC status and the maintenance of solid credit ratings from Moody's, Standard & Poor's and Fitch.

On 27 June 2017, the rating agency Standard & Poor's decided to:

- downgrade SNCF Réseau's stand-alone credit profile from B+ to B;
- put its main rating (AA taking into account the French State's backing) on a negative outlook.

The agency explained that its decision was due to the projected debt increase over the next 10 years.

As at 31 December 2017, the three agencies attributed the following short and long-term credit ratings:

Long-	Short-term
term	Short-term

Moody's	Aa2	P-1
Standard & Poor's	AA	A-1+
Fitch Rating	AA	F1+

Financing strategy: international diversification and the various debt formats proposed to investors.

SNCF Réseau has implemented a financing strategy that is adapted to the new needs and constraints of investors:

- Accentuate the geographical diversification of the investor base by setting up a recurring US-dollar issue programme;
- Offer investors new products and new formats, including a Green Bond programme. The reduced energy used by rail transport enables SNCF Réseau to exercise green bonds to finance the renewal or development of the rail network. In 2017, SNCF Réseau therefore became one of the first 15 green bond issuers worldwide. The allocation of these funds to rail infrastructure engineering work illustrates its contribution to combating climate change;
- Improve the SNCF Réseau share's visibility and liquidity by increasing the portion of benchmark public issues;
- Strengthen SNCF Réseau's financial reporting, specifically via a programme of annual road shows in its four major zones of interest (North America, Asia, Europe, and the Middle East).

This financing strategy was further developed in 2017.

SNCF Réseau still benefits from solid financing, whatever the maturity, from a chiefly international investor base: the 31 December 2017 issues were subscribed by investors from France (27%), other Euro Zone countries (29%) and the Rest of the World (44%).

- 2017 issues

 "Green Bond": after the successful inaugural Green Bond issue in October 2016, SNCF Réseau launched two new Green Bond issues: €1 billion over 17 years (maturing in March 2034) and €750 million over 30 years (maturing in December 2047);

³ New name for Treasury Bills

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- Inflation-indexed bonds: private placements of €457 million over 30 years (maturing in July 2047);
- Public issue of US\$1.5 billion (€1,273 million) over 3 years (maturing in October 2020);
- Other foreign currency issues:
 - o HKD 937 million (€112 million) over 8 years
 - o AUD 90 million (€64 million) over 10 years
 - o SEK 2.3 billion (€236 million) over 30 years
 - o JPY 10 billion (€81 million) over 30 years
- Benchmark issues with various maturities: Simultaneous issues of €650 million over 10 years and €250 million over 20 years.

SNCF Réseau hopes to diversify the range of formats proposed to investors and seeks to demonstrate adaptability and responsiveness faced with the changes in investor requirements.

- Net debt repayment amount

The net debt repayment amount, excluding accrued interest receivable, stood at €45.2 billion as at 31 December 2017, compared to €42.0 billion as at 31 December 2016. It decreased by €3.2 billion during the year, of which €1 billion involving the guarantee deposit arising from the bilateral amendment to hedging agreements. This led SNCF Réseau to deposit cash collateral in its bank accounts according to market changes. Excluding this impact, the net debt repayment amount fell by €2.2 billion. Taking into account all the financial instruments and the scope impacts of Public-Private Partnerships (PPP), the IFRS net debt amounted to €46.6 million as at 31 December 2016, compared to €44.9 million year-on-year.

- Maintenance of sufficient liquidity to ensure the company's financing

As at 31 December 2017, SNCF Réseau had €3.3 billion in liquidity, primarily comprised of investments.

The investment vehicles used are UCITS and negotiable debt securities with maturities of less than one year that guarantee a high level of liquidity and very low risk.

The €1.25 billion syndicated credit facility expired in July 2017. It was renewed as from June 2017 for 5 years and a total amount of €1.5 billion (possibility of an increase to €2 billion) with 15 SNCF Réseau partner banks.

No amounts were drawn down from either this new facility or the previous one as at 31 December 2017.

2.4.2 Market risk management

Financial risks are described in section "3.4.1 Financial risk management."

2.5 FINANCIAL RELATIONS WITH THE FRENCH STATE

2.5.1 Public funding related to network investments

With regard to its network investments and project studies, SNCF Réseau receives co-financing from public and private partners: the Agence de financement des infrastructures de transport de France (AFITF or French Transport Project Funding Agency) or other government authorities. The grants obtained by SNCF Réseau as at 31 December 2017 totalled €1,762 million, of which €302 million from the AFITF. Grant receivables due decreased to €799 million as at 31 December 2017 (of which €370 million from the French State and AFITF), compared to €985 million as at 31 December 2016 (of which €468 million from the French State and AFITF), but the portion exceeding six months decreased by €344 million.

2.5.2 Taxation

The direct business activity of SNCF Réseau is solely carried out on French soil and, with the exception of technical assignments, it has no direct presence or investment project on its own account in a country other than France. SNCF Réseau is not present in any non-cooperative states and territories.

2.5.3 Reclassification of a portion of the SNCF Réseau debt

As part of the reorganisation of government debt as defined by the Maastricht Treaty, a portion of SNCF Réseau's debt was recorded by INSEE as government debt totalling €10.9 billion in 2014. This reclassification did not lead to any changes in the SNCF Réseau financial statements. SNCF Réseau also remains responsible for the operating management of the debt, without any change in previous practices.

SIGNING OF THE MULTI-YEAR PERFORMANCE 2.6 CONTRACT

On 20 April 2017, SNCF Réseau and the French State signed a multi-year performance contract for the period 2017-2026 (inclusive), in accordance with Article L. 2111-10 of the French Transportation Code. SNCF Réseau's commitment covers the main aspects of network management and a financial trajectory including the French State's financial backing.

This 10-year contract, which is to be updated every three years, offers SNCF Réseau a certain visibility to improve network management over the medium term and define and roll out the main thrusts of its modernisation policy. It also provides rail system stakeholders with the objectives and priorities that will be adopted by the infrastructure manager.

As stipulated in the aforementioned article of the French Transportation Code, SNCF Réseau will report every year on the implementation of this contract in its management report. This report is subject to the approval of the Autorité de régulation des activités ferroviaires et routières (French Railway and Road Regulation Authority). The management report and the authority's approval are sent to the French Parliament and the French High Committee for the Rail Transport System.

The contract's first year of implementation is outlined in this integrated management report. Most of the commitments contained therein are medium or long-term and are still being implemented. Based on this initial report, future implementation reports will be gradually updated with achievements as provided for in the contract. Furthermore, three more detailed thematic reports - referred to in Article 4 of the contract - will be published by SNCF Réseau in 2018 on its more regular initiatives.

The contract sets out different types of commitment: contractual indicators, industrial milestones, drafting of thematic reports as well as other industrial and commercial commitments.

2.6.1 **Contractual indicators**

The contract defines twenty indicators: ten industrial and commercial indicators and ten financial indicators (some of which are for monitoring purposes). The following table describes the 2016 and 2017 values, the contract's 2026 targets and the intermediate milestones between 2018 and 2021, which will be used for the contract's update every three years as provided for by the French Transportation Code.

					Mile	stones	Target
Industrial and commercial indicators		unit	2017	2016	2018	2021	2026
Maintenance productivity		-	-	-	Indicat	or under develo	pment
Summary safety indicator		-	-	-	Indicat	or under develo	pment
	Compliance with completion costs	%	64	-	73	77	81
Quality of investments (excluding new line construction)	Compliance with completion times	%	95	94	93	94	95
	Compliance with the functional programme	%	-	-	Indicator under develop		pment
Average cost per km of track renewal operat (high-speed line, IdF and UIC 1-6). Base inde		-	104 (provisional)	96	103	106	106
	High-speed lines	km	0	0	0	0	0
Track length subject to traffic speed slowdown, as at 31/12	UIC 1 to 4	km	544	672	500	250	150
5101140411, 45 41 01712	UIC 5 to 6	km	750	695	700	500	400
Freight capillary line traffic covered by a par	tnership agreement in force	Train- km	895,100	894,60 0		o the commitme and the activity	
Freight and passenger service quality		-	-	-	Indicator under development		pment
Infrastructure quality by line	rastructure quality by line Indicator under		or under develo	pment			
Quality of freight paths		%	(1)	64.9	61.5	To be defined in consultation	80.8
Frequency of accidents with work stoppage million of hours worked).	(number of accidents per	-	9.78 (2) (3)	11.22 (2)	8.33	6.1	To be determined

(1) The 2017 value will be available in Q2 2018 and published in the 2017 thematic report on the commercial offering, traffic and service quality.

(2) Within the SNCF Réseau scope. The scope is being extended to external subcontracting companies.
 (3) Value on a rolling 12-month basis at the end of October 2017

					Miles	tones	Target
Financial indicators		unit	2017	2016	2018	2021	2026
Coverage rate of marginal cost through companies	n infrastructure fees paid by freight	%	68	64	-	-	-
Savings generated by productivity gain	s (cumulative as of 2017)	€m	150	-	(1)	453	1242
Coverage rate of full cost based on dep accounting methods	oreciation and amortisation	%	92	94	(1)	(1)	(1)
Net debt repayment amount		€bn	45.2	42.0	(1)	(1)	(1)
IFRS net debt		€bn	46.6	44.9	(1)	(1)	(1)
Net debt / gross profit ratio		ratio	23.85	22.24	(1)	(1)	(1)
Gross profit / finance cost		ratio	1.28	1.32	(1)	(1)	(1)
Average rate of SNCF Réseau debt		%	3.35	3.46	-	-	-
Average remaining maturity of SNCF R	éseau gross long-term debt	years	12.5	12.9	-	-	-
Moody's, Standard & Poor's and	Long-term	rating	Aa2 AA AA	Aa2 AA AA	-	-	-
Fitch rating	Short-term	rating	P-1 A-1+ F1+	P-1 A-1+ F1+	-	-	-

(1) Confidential values.

To create the maintenance productivity indicator, SNCF Réseau is developing a new technico-economic modelling for infrastructure maintenance, designed to measure actual volumes, assess performance measurement and optimise asset management. This modelling, which should be ready in 2018, will be used directly to calculate the contractual indicator.

After having consulted the Établissement public de sécurité ferroviaire (EPSF – French Railway Safety Authority), SNCF Réseau and the French State are currently finalising work and discussions on the summary safety indicator. The common summary indicator project has four components: causes of rail breakage, track twists, causes of signalling breakdowns and signal passing authorisations without prior verification.

The quality of investments is assessed according to three parameters:

- Compliaynce with completion cost: the 2017 figure (based on investments exceeding €5 million completed in 2017) stemmed from a very mixed situation according to the types of investment: 100% of projects excluding track renewal comply with the budget notified at the end of the project study phase, whereas only 21% of track renewal operations meet the allocated budget. The latter point will be subject to an in-depth review in 2018 to turnaround the situation.
- Compliance with completion times: out of 100 operations monitored, 95 came into service on the agreed date. Among these feature the new SEA, BPL and CNM lines and the Paris Gare de Lyon signalling station.
- Compliance with the functional programme: more recent and more difficult to calculate, its preparation depends on the ongoing project management reorganisation.

The average cost per km of primary network track renewal operations is calculated following the completion of hundreds of operations per year and then adjusted as and when the accounts for each of these operations are approved and any disputes are resolved (deadline of up to three years). The increase observed between 2016 and 2017 was primarily attributable to the surge in operations in the lle-de-France network, due to the problems in implementing the new "Dense zone" all-in-one track removal units which did not deliver the expected results in the initial projects. Other setbacks also impacted the completion conditions and the cost of certain projects (night work, work without closing the adjacent track).

Track length subject to traffic speed slowdown decreased overall across the network (-206 km in total). The high-speed

lines do not experience slowdowns; the slowdowns on the main lines of the conventional network sharply reduced (UIC 1 to 4, -128 km), while they increased slightly in the rest of the primary network (lines UIC 5 and 6, +55 km), mainly due to the temporary 80 km/h speed limits that only affected freight trains. The scheduled renewal work should reduce the volume of slowdowns so that the contractual milestones can be met.

Freight capillary line traffic covered by a partnership agreement in force measures the scope of the joint measures undertaken by SNCF Réseau and stakeholders to sustain local freight lines. Firstly, SNCF Réseau and the AFITF define a national programme to divide up the available funds. Each operation is then subject to an agreement between SNCF Réseau and AFITF, and then SNCF Réseau and local co-financing partners. From 2015 to 2017, eleven operations were covered by a partnership agreement, representing traffic of nearly 900,000 train-km per year.

Freight and passenger service quality is assessed by a working group with the stakeholders of French Network Operators Committee (COOPERE) (railway undertakings, French transportation organising authorities, authorities) based on SNCF Réseau's proposal drafted in 2017. The draft indicator incorporates several components (primarily the quality of path allocation and traffic), each comprising several indicators.

Infrastructure quality by line was subject to discussions between SNCF Réseau and stakeholders in order to prepare the indicator, scheduled for mid-2018 in the contract.

Freight path quality is assessed using a composite indicator determined with the stakeholders at the French rail freight ministerial conference. It is used to calculate changes in the freight fee scale, thereby linking service quality and fee increases. The value published in the 2017 service timetable (60.8), calculated over five quarters in 2014-2015, is the benchmark for this indicator. The annual value of the 2016 indicator reveals an improvement compared to previous years. The 2017 value will be available in the Spring and published in the annual report on the commercial offering, traffic and service quality.

In 2017, there was substantial improvement in the frequency of accidents with work stoppage within SNCF Réseau. The indicator is currently being extended to service providers working on the network, although they cannot to date obtain the same information as that available internally.

The coverage rate of marginal cost through infrastructure fees paid by freight companies reflects SNCF Réseau's long-term efforts to reconcile freight pricing with its directly attributable variable costs. The rise observed in 2017 was mainly

attributable to the fee scale increase according to a +2.4% indexation.

For 2017, the performance plan resulted in gross gains of €150 million, i.e. a major first milestone.

For 2017, the full cost of the network calculated using the financial accounts, based on the historical cost before asset impairment, totalled \notin 7.1 billion, which was 92% covered by earnings. The decrease in this coverage rate compared to 2016 (94%), despite the improvement in gross profit and stable finance costs, was due to the increase in depreciation and amortisation.

The 2017 changes in the following financial indicators are described in section 2.4:

- Net debt repayment amount
- IFRS net debt
- Average rate of SNCF Réseau debt
- Average remaining maturity of SNCF Réseau gross long-term debt
- Moody's, Standard & Poor's and Fitch ratings.

The 2017 changes in the net debt/gross profit ratio are explained in section 1.3.2 Golden rule.

The gross profit/finance cost ratio dropped slightly as the improvement in gross profit (+ ϵ 29 million) did not offset the rise in net borrowing costs (ϵ 63 million) in line with the debt increase.

2.6.2 Industrial milestones and industrial and commercial commitments

The contract sets out sixteen industrial milestones corresponding to the roll-out or commissioning of railway or internal management projects on a given date. The milestones concern projects undertaken before the contract was signed that will be completed over several years. Appendix 10 to the contract lists the milestones and indicates the deadlines set by the French State; certain milestones were set for 2017. The progress of their implementation is shown hereafter.

The creation of an indicator measuring the impact of renewal on the maintenance costs of the corresponding assets depends wholly on the economic modelling of the aforementioned infrastructure's maintenance that is complex due to the wide range of infrastructure components and maintenance operations.

Investment pre-projects regarding systems knowledge (interoperability, gauge, etc.), capacity (impact on the five-year schedule) and resource availability are currently being approved, in line with the scheduling: to date, governance bodies are informed of the impact of the projects on capacity planning over the next three years only. Nevertheless, SNCF Réseau is advancing by six months every year towards the fiveyear schedule target as currently defined in the contract (chiefly renewal volume).

The master plans relating to the 25 lines and 20 hubs of the Major Network Modernisation Plan are produced according to a process that is less sequential but in the same frame of mind as that described in the contract (analysis then consultation then creation). The master plan analyses incorporate the network's current technical state, service and service quality. At the end of 2017, two-thirds of the analyses were performed; the remaining analyses are under completion or will be initiated in the first half of 2018. Their consultation with stakeholders, initially scheduled in 2018 and which mainly focuses on mobility requirements and future services, was organised as from 2017 for the three primary Trains d'Equilibre

de Territoire lines and in certain regions (Burgundy, Brittany, Pays de la Loire and Occitanie). The company has also committed to a quarter of the master plans and will continue their deployment in 2018, taking into account local contexts. Certain master plans, the studies for which were taken into account in the State-Region Contracts (as for the Marseille and Toulouse hubs) have made significant progress (deliverables shared with the Infrastructure Guidance Board and the French Minister of Transport).

As planned in the contract, the definition of priority criteria for renewal operations led to the creation of a methodology in 2017. This methodology was used for decision-making purposes by the SNCF Réseau Board of directors on 30 November 2017 regarding the renewal strategy of two lines (Amiens – Serqueux and Troyes – Belfort). Using this method, future operations will be classified by line according to these same criteria in 2018.

The milestone that consists in incorporating the cost reduction study for each investment pre-project presented to the *Comité national des investissements* et engagements (NICC or French National Investment and Commitments Committee) was attained in the last quarter of 2017. The importance of this project enhancement lever resulted in the creation of a model for the presentation of cost reduction strategies to the NICC at the end of 2017 that will be applied as from the first half of 2018.

Pursuant to the contract, SNCF Réseau conducted a satisfaction survey among various customers and partners (freight or passenger RU, Organising Authorities, rail or port rail infrastructure managers, shippers and other candidates) on network performance (traffic, commercial and capacity performance), commercial offerings and pricing as well as their perception of the capacity process.

The contract provides for the definition in 2017 of a carbon assessment of SNCF Réseau's activity. The preliminary inventory was used to identify the company's various carbon footprint headings in terms of engineering, operations and socio-economic assessment and produce functional specifications to build a transversal carbon assessment tool to be developed in 2018.

The identification of certified company procedures varies greatly according to the company's businesses. Whereas SNCF Réseau engineering is already certified, certain businesses are only partially certified or not at all. The new organisation planned for 2018 will review this matter, with respect to the organisations in place and their duties.

The milestone on the inclusion of service providers in the contractual indicator on work safety is described above.

Finally, the investment summary table shown in the various SNCF Réseau governance bodies was updated to take into account the types of operation introduced by the multi-year contract (types of lines and investment).

2.6.3 Thematic reports

Article 4 of the multi-year contract provides for the drafting of three thematic reports on the state and maintenance of the network, the commercial offering, traffic and service quality and network modernisation and innovations, outlining the progress of the Major Network Modernisation Plan. The timetable for these reports is subject to data availability over time and therefore they will be published gradually during 2018.

3 RISKS AND THEIR MANAGEMENT

The French Law of 9 December 2016 on transparency, the fight against corruption and modernisation of economic life ("Sapin II") reorganises the information to be presented in the management report and the Chairman's report on internal control and governance. The latter report, renamed the report on corporate governance, presents SNCF Réseau's governance and management compensation.

3.1 TYPES OF RISK

The various risks liable to impact the company's activities are identified according to their type and assessed according to the probability of occurrence, impacts and level of control. Impacts are regularly assessed for each risk in accordance with a defined list of financial, legal, operating and reputational impacts, with each risk potentially having several impacts.

high impact risks in operational areas:

The main risks that may have significant operational impacts primarily concern the use of the railway network and investments (including construction risks). They are subject to a specific risk analysis designed to identify the main control measures to be implemented. These risks are defined and their management described in section 3.2.4 below.

high impact financial risks:

Market risks comprise interest rate, liquidity risk, counterparty and foreign currency risks. These risks are defined and their management described in section 3.2.6 below.

In addition to these risks specific to financial market activities, SNCF Réseau is exposed to financing risks related to its financial involvement in various investment operations and counterparty risks involving customers or co-financing bodies. The risk of project deviation is also a significant financial issue for the entire company.

- high impact legal risks:

In addition to legal risks related to the possibility of the company being sued as an owner and operator, and also as prime contractor, SNCF Réseau is regularly confronted with new legal risks related to developments in the regulatory framework governing the company, particularly regarding its rail infrastructure management or project management activities, and under the partnership agreements binding SNCF Réseau to its various partners (legal security of new concession or public-private partnership agreements). The inclusion of the unified infrastructure manager within the Public Rail Group under the rail reform law of 4 August 2014, which came into force on 1 July 2015, has increased the risks relating to nondiscriminatory competition and tightened the procedural requirements needed to maintain SNCF Réseau's independence vis-à-vis any other rail company. The management of these risks is described in section 3.5.1 below.

risks relating to SNCF Réseau's status

The French State can intervene in major decisions affecting SNCF Réseau, since it is a State-owned industrial and commercial institution (EPIC).

The multi-year performance contract, submitted to ARAFER for its opinion and signed by the French State on 20 April 2017, provides that SNCF Réseau has the means to undertake its industrial transformation and fulfil the missions attributed by the French State.

- high impact reputation risks:

These risks arise chiefly from rail incidents and accidents that may potentially tarnish the company's image with respect to investors and partners. Other risks related to the network manager's activities (including outside the rail sector itself) are also identified as being likely to damage the company's reputation and are treated under this category (e.g. risk of damage to the environment).

- risks relating to IT security:

SNCF Réseau's operations are dependent on IT systems. A failure or breakdown in their security systems could adversely affect its reputation and have a negative impact on its financial performance.

3.2 GENERAL RISK MANAGEMENT ORGANISATION

SNCF Réseau's risk management and internal control mechanisms play an increasingly important role in the conduct and management of the company's various missions and activities.

Over and above the external environment which requires its own control system, SNCF Réseau has implemented internal procedures designed to verify that regulations are properly applied and the measures undertaken to mitigate the primary risks likely to impact its assets (human, material and information-based), reputation or results are effective.

Measures are adopted at all levels to improve these procedures to boost risk prevention and management.

3.2.1 Risk Management Division

The Risk Management Division, which reports to the Innovation and Industrial Performance Department, is responsible for setting up, coordinating, developing and operating the SNCF Réseau's general risk management system (general Enterprise Risk Management (ERM) system). It provides the company's team and management with the resources, tools and methodological aids that they need to obtain a better understanding of the risks inherent to the activities arising from the missions attributed to SNCF Réseau under the rail reform law 2014-872 of 4 August 2014.

The Risk Management Division prepares and updates the company's risk mapping, lists and prioritises critical risks, identifies the risk owners, obtains relevant actions plans from the owners and ultimately monitors the progress of such plans. It also makes sure that the risk reduction policies defined by risk owners meet an acceptable level for the company.

It works in conjunction with the Security division of the Network Security & Safety Department, the Legal Affairs and Compliance Department, the National Chief Fire Safety Officer, the Internal Control Department and the Chief Information Security Officer (CISO).

3.2.2 SNCF Réseau's risk mapping process

The SNCF Réseau risk mapping process complies with the methodology adopted by the Audit and Risk Directorate. It rolls out two different yet complementary approaches within SNCF Réseau:

- Within executive management; to ensure its maximum involvement in managing the company's major risks, i.e. major strategic risks, which are identified at individual meetings with SNCF Réseau Executive Committee members. These risks, which are limited in number (12 in 2017), are validated by the Chairman following an Executive Committee meeting. They are regularly monitored and covered by cross-cutting action plans implemented by a designated member of Executive Management. The annual update of this risk mapping is submitted to the Audit, Accounts and Risk Committee.

 Within certain departments: The risk mappings, which are to be updated annually, incorporate specific action plans. Risk owners (project director or manager) are regularly asked to inform executive management about action plan implementation progress and problems.

This system relies heavily on the network of "risk" contacts within each entity, a set of tools designed to identify vulnerabilities and associated risks and monitoring dashboards that are harmonised throughout the company. The Risk Management Division is responsible for ensuring overall consistency.

By regularly monitoring these risk levels, a risk trajectory combining past levels and future trends can be set up.

The various risks that could impact the company's activities are identified according to type and assessed using a defined list of operating, financial, legal, reputation or regulatory impacts, with each risk potentially having several impacts.

3.3 MANAGEMENT OF KEY OPERATING RISKS

Key operating risks and their management are described in this section. The consideration and importance of these risks makes Safety the number one challenge in the company's Corporate Social Responsibility policy, the measures of which are developed in section 4.

3.3.1 Rail operations safety

Rail operations safety mainly includes:

- technical safety relating to the design and maintenance of rail infrastructure equipment,
- traffic management safety.

Safety is guaranteed through the reliable design of procedures and the assurance by authorised operators that such procedures will be implemented.

SNCF Réseau observes and values regulatory requirements. The organisation and management set up by SNCF Réseau to comply with these requirements are governed by the corresponding national safety authorities - in France, the EPSF, to obtain safety authorisation for national rail network management activities.

SNCF Réseau's key management principles for rail operations safety are defined in the general security and safety policy published in 2017. They are also set out in the Safety Management System manual. This manual was submitted to the EPSF which issued a 1-year safety authorisation to SNCF Réseau on 1 July 2015. This authorisation was renewed for five years on 1 July 2016.

SNCF Réseau draws up an annual safety report with regard to its infrastructure management activities. The EPSF collects the annual reports from all Infrastructure Managers and Railway Undertakings in order to draft its annual safety report on the French national rail network.

The safety architecture is organised around the SNCF Réseau's four business lines and the specific organisation for Ile-de-France. Delegations are prepared based on the Chairman's delegation and allocated to all the operating units of these business lines, via the Deputy General Directors, and to the General Director for Safety. Safety responsibilities at each level, safety management in each business line and the cross-cutting national and regional safety bodies are all defined.

A certain number of services are pooled together with the PRG on behalf of SNCF Réseau, among others. This applies to:

- The Safety Audits Department, reporting to the Audit and Risk Directorate, which provides EPIC SNCF Réseau's management and the various managers in charge of railway safety with a constant assessment of the level of safety at the EPIC's institutions and various entities in terms of compliance with safety operating procedures and the quality of their management. This assessment takes the form of periodic compliance audits (National Operating Safety Audits). Under the contractual authority of one or more of the three EPICs, including SNCF Réseau, the Safety Audits department conducts design or thematic audits in order to assess the ability of a system or the capacity of a product or process to meet the specified safety requirements and objectives. The Safety Audits department is ISO 9001:2015 certified by AFNOR.
- The Systems Safety department, whose main duties are to:
 - o facilitate the PRISME4 programme, the management transformation policy, and make sure that it is well established within the PRG and develop a common safety culture.
 - Act as the interface on safety matters between SNCF Réseau and SNCF Mobilités
- The General Safety Inspectorate is responsible for conducting surprise inspections and responding to any company on safety matters, identifying signs of weakness, anticipating risks and issue risk warnings. To this end, it uses the *Canal Sécurité* tool.
- The managerial transformation for work health and safety department in charge of the PRG's work health and safety prevention policy.

3.3.2 Integrated safety

SNCF Réseau undertakes the following measures as part of its safety management policy:

- Prepare the SNCF Réseau safety risk mapping, identify causes, safety barriers and define recurring scenarios and methods of gauging the barrier effectiveness in order to set up a safety management procedure per risk.
- Roll out locally (by region) the national safety risk priority matrix.
- Develop the inclusion of human and organisational factors and non-technical competencies in the upstream (system, documentation and organisational design), downstream (feedback) and operating (error recovery tools and training systems) processes. These measures involve specific focus on procedural errors and extensive work on the effectiveness of human and organisational factor barriers.
- Cover safety matters with an integrated insight into its various components: work to improve safety not only by type of incident (rail operations, work-related health, fire, environment, security, etc.) but with an overview in order to monitor all safety risks, including cross-cutting risks or risks transferred from one area to the next.

⁴ See section 4.2

3.3.3 Information systems security and data protection

Information systems (IS) break down into two main units that constantly interact:

- The management or conventional IS managed by the Information Systems Department.
- The industrial IS managed by the Engineering and Projects Department.

They mainly rely on the executive management of EPIC SNCF within the PRG to host the IS, cross-cutting office automation services, and management of cross-cutting HR and accounting IS in addition to services processed internally by SNCF Réseau such as local support offered by Maintenance & Works.

The company's Information Systems Security Policy determines the general IS security framework in accordance with the requirements imposed by governmental compliance authorities with respect to new European regulations and directives such as the General Data Protection Regulation (GDPR) or the Network and Information Systems directive (NIS).

The Executive Management Committee, SNCF Réseau's governance and decision-making body, ensures that the IS function is developed across the entire company. It monitors the general progress of programmes and measures, approves the budgets and investments presented by the Information Systems Department or Engineering and Projects Department and supervises IS Safety and Continuity work.

Overall management is ensured by various Business Line steering committees organised by the Information Systems Department or Project steering committees organised by the Engineering and Projects Department, which bring together Business Lines and IS.

Each steering committee uses a quality management system (QMS, ISO 9000 and ISO 20 000 classification for the Information System Department), specific to IS activities, under the responsibility of a quality manager.

IS security is managed by the SNCF Réseau Chief Information Security Officer (CISO) who reports to the Information Systems Manager but has authority over the entire EPIC SNCF Réseau with the assistance of 2 Cyber-security Managers (at the IS department for the management IS and at the Engineering and Projects Department for the Industrial IS). The CISO coordinates an Information Systems Security & Continuity network within each business line management. It forms part of the public rail group's general IS security governance coordinated by the Group CISO.

To this end, an IS Security Policy & Directives database covering all Management and Industrial IS currently being finalised and rolled out in line with that of the PRG. It comprises an IS security policy, all ISO 2700X topics determining challenges, roles, and responsibilities in addition to annual and multi-year security objectives. This database is continuously updated.

The overall systemic IS security approach is based on user and customer insights, the analysis of deviations from the rules, dashboards, IS security feedback, active monitoring of risks and new technologies, audits by the SNCF Réseau CISO in the same way as those of the PRG and the Security mission within the Network Security & Safety Department. In the past three years, IS Security has produced a set of IS Security Services and other toolboxes in order to deploy Security by design and guarantee IS security at the earliest project phase in the same way as the gradual compliance upgrades of existing IS.

IS Security risks are mapped annually for the Management and Industrial IS and this mapping is transmitted to the SNCF Réseau Risk Management Division and the Group CISO, in the same way as the IS department's risk mapping of support business processes.

IS business continuity

The aim is to avoid any interruption or lengthy disruption of activities relating to Information Systems or the IS itself following a major incident.

The SNCF Réseau CISO calls on the IS Business Continuity Manager to update the mapping of critical IS, key sites and personnel and to organise the back-up strategy in the event of an incident.

Several incident drills were carried out in 2017, mainly involving Front Office Cash for all its IS infrastructures or site unavailability at 92 avenue de France, for which the back-up plan efficiency was measured. Similarly, a CyberCrisis drill was carried out to measure management of detection and response processes when faced with this type of attack.

3.3.4 Industrial and environment risks

a) Environmental risk generated by our operations

The adoption of the polluter pays-principle (Law of 1 August 2008 and Decree of 23 April 2009) implemented an environmental liability system for companies such as SNCF Réseau. It introduces a "strict liability" regime for highly polluting activities (soils, water and natural habitats) with an obligation to provide quick compensation.

For SNCF Réseau, environmental risk management is based on:

- A strong commitment to incorporate industrial ecology principles (limit the environmental impacts of activities), starting from the project design phase.
- Three key principles:
 - o compliance with legal and regulatory requirements
 - o responsibility to assume the risks inherent to its activities
 - o long-term control over financial and non-financial costs arising from any damages.
- Three sets of measures:
 - o organisational measures, with the set-up of strengthened environmental management
 - o technical measures, with the roll-out of action plans (e.g. water, soil and air-based themes)
 - o financial measures, with the possibility of coverage by provisions or insurance.

An environmental management system designed to manage operating environmental risks is rolled out in all SNCF Réseau institutions, so as to manage risks and costs, incorporate regulatory requirements and mobilise personnel.

b) Safeguarding our infrastructures against climate events

The measures taken to safeguard our infrastructures against climate change (intense heat or cold, storms, wind, etc.) are described in section 4.2.5.

3.3.5 Risks of malicious acts (Security)

Within the Network Security & Safety Department, the Security Division is responsible for defining, proposing and implementing the strategy to safeguard the French national rail network and the EPIC. This strategy is based on a general SNCF RESEAU 2017 FINANCIAL REPORT - 25

approach consisting in detecting, analysing and treating all the security risks (malicious acts and threats) to which the persons, assets (tangible or intangible) and all work activities and processes are exposed to guarantee their protection and sustain their performance.

To fulfil its duties and objectives, the SNCF Réseau Security Division operates:

- using its own action, expertise and investment resources, in order to assess threats, protect facilities, detect incidents, reduce impacts, safeguard operating systems and processes, enhance protections, treat security flaws as a priority and raise awareness among employees about security matters;
- using resources and solutions provided by the PRG Security Division, according to SNCF Réseau's needs, expressed in the annual services agreement (preventive inspections by railway security guards, alarm-based intervention, CAPM (metal protection and analysis unit)-SEZAM (mobile alarms with motion sensors and video recording) activities, interventions, police support operations, CEZAR NG tool and air surveillance operations, etc.).

The Security Department coordinates a network of security correspondents within the business lines in order to coordinate security and defence action plans and programmes. These national correspondents rely on local representatives in the institutions (Infrastructure and Traffic, Infrapôles - equipment and maintenance centres and Infralog - logistics specialist for SNCF's Infrastructure division) and regional entities (interregional E&P divisions).

In 2017, the Security Division worked closely with the Business Line and IDF Executive Management Safety teams to implement long-term security strategies based on 5 primary aims:

- Better identify the vulnerabilities and threats to which SNCF Réseau and the business lines are exposed
- Automatically consider security in projects
- Boost the protection of the French primary national rail network and define security standards
- Professionalise security players
- Improve the security culture within the company

In the Security & Defence sector, the Security Division has undertaken to implement an action plan, with the backing of the business lines, to comply with government requirements and the new French Transport Safety Directive.

3.3.6 Fire safety

The National Chief Fire Safety Officer is responsible for managing fire safety matters, i.e.:

- definition of a general fire safety policy for SNCF Réseau and its assets, particularly those managed daily by the EPIC SNCF Real Estate Department under service agreements (general real estate appraisal agreement),
- roll-out of a specific policy to safeguard rail network technical facilities (switching stations, etc.) against fire.

On behalf of SNCF Réseau, the EPIC SNCF Real Estate Department:

- fulfils the owner's obligations,
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- ensures compliance with fire safety rules (compliance upgrades),
- conducts fire safety visits in buildings,
- ensures that fire safety management is consistent within the PRG,
- proposes fire safety training courses by the institution's fire safety correspondents.

3.3.7 Personnel safety

Personnel safety is managed at all levels of the company in a bid to significantly reduce accidents. The company aims to reduce the rate of accidents with work stoppage (between 2015 and 2020) by half.

Substantial work was undertaken in 2017 to help manage work safety for service providers by offering assistance, sharing feedback and implementing new monitoring indicators and revised procurement and contract monitoring rules.

The commitment to safeguard our production is described in section 4.2.1.

3.4 FINANCIAL RISK MANAGEMENT

3.4.1 Financial risks

Liquidity risk management

Under its financial strategy, SNCF Réseau must at all times have the necessary financial resources to fund its current operations and investments.

In addition to its own resources and the public funding it receives, SNCF Réseau secures most of its financing through organised debt markets or over-the-counter transactions.

In 2017, SNCF Réseau had several financing programs with varying maturities:

- Euro Medium Term Note (EMTN) Program, general framework for SNCF Réseau bonds, for a maximum amount of €50 billion;
- Euro Commercial Paper (ECP) Program, short-term issues, for a maximum amount of €5 billion;
- Negotiable European Commercial Paper (NEU CP) Program for a maximum amount of €3 billion.

Furthermore, SNCF Réseau also benefits from a €1.5 billion credit line that has never been drawn down.

To offer financial markets greater visibility over the quality of its signature, SNCF Réseau is rated by three agencies: Moody's, Standard & Poor's and Fitch.

As an issuer of listed debt securities, SNCF Réseau must comply with certain regulatory requirements vis-a-vis the *Autorité des marchés financiers* (AMF or French Financial Markets Authority) the authority governing the EMTN programme, and applicable rules and provisions in other jurisdictions.

> Interest rate risk management

As part of its financial strategy and to limit its exposure to an increase in its financial expenses, SNCF Réseau has defined principles in order to minimise its exposure to interest rate risk.

The current historically low interest rates and the desire to maintain long-term economic equilibrium led the SNCF Réseau Board of directors to opt for a breakdown of the net debt repayment amount that was 90% fixed-rate, 6% floating-rate and 4% inflation-indexed. A limited margin around each of these thresholds is authorised by the Board of directors.

Middle Office/Control verifies that this breakdown is maintained on a daily basis. To achieve this breakdown, SNCF Réseau may use option-based derivatives or interest rate swaps for hedging purposes.

> Management of currency risk

SNCF Réseau negotiates foreign currency financing, which is translated into euros.

> Counterparty risk management

SNCF Réseau is exposed to counterparty risk in connection with its cash investments and the subscription of derivatives from its financial partners, in the event the debtor refuses to honour all or part of its commitment or does not have the means to respect it.

To manage and limit this risk, investment instruments and derivatives are only entered into with financial institutions corresponding to the credit rating and equity criteria validated by the SNCF Réseau Board of directors.

A limited commitment amount by institution is determined according to these criteria.

Middle Office/Control monitors that the authorised limit by counterparty is observed on a daily basis.

To hedge counterparty risk, SNCF Réseau performs margin calls with its financial counterparties. Collateral (in cash only) is called up in the amount of the market value of the financial instrument portfolios for each counterparty with whom SNCF Réseau is at risk.

The sums thus received by SNCF Réseau amounted to \notin 64 million at the end of 2017, compared to \notin 34 million at the end of 2016.

3.4.2 Risk of fraud and anti-corruption

3.4.2.1 Fraud

The main risks of fraud currently observed involve material theft, the use of company vehicles for personal reasons and use of supplier bank details for individual purposes. Two cases were identified in 2016, and measures were undertaken to prevent them from happening again. Proven cases of fraud are subject to investigations, resulting in disciplinary measures against personnel or sanctions against suppliers.

The teams of the SNCF Réseau's various departments are regularly reminded of professional conduct and ethics rules. The SNCF EPIC Ethics and Conduct Office assists these departments and their various entities in:

- conducting investigations for prevention or corrective purposes,
- providing constant ethical advice,
- identifying responsibilities and drawing up recommendations in order to ensure improved risk management,
- steadily promoting the ethical approach within the Group,
- facilitating "Ethics mornings" during which the professionals share their experience and discuss with participants.

The Ethics and Conduct Office coordinates ethics officers who are in charge of transmitting, improving and, where necessary, adapting the approach to the activities and businesses of the entities.

3.4.2.2 Anti-corruption and the SAPIN 2 Law

The Law of 9 December 2016 on transparency, the fight against corruption and modernisation of economic life ("Sapin II") modifies the anti-corruption approach adopted by various players, switching from a compliance requirement to the need to justify any defined anti-corruption measures and policies.

Within SNCF Réseau, anti-corruption involves the implementation of several measures such as:

- Corruption risk mapping, organised by the risk manager who has identified risk areas such as purchases and supplier relations, and sales and customer relations. This mapping was presented to the Executive Committee and the Audit, Accounts and Risk Committee.
- Training relating to these risks, organised by the Ethics Office, which determines the groups and profiles to be trained (in business lines and at buyers)
- A Code of Conduct: recently distributed by the Ethics Office
- Assessment/due diligence procedures, designed to provide extensive knowledge about a potential partner and its resources to fulfil the expected contractual services. These procedures were drafted by the Ethics Office and the Purchasing Department
- Internal or external accounting control procedures: a working group facilitated by the Audit and Risk Directorate did not find any evidence of corruption in SNCF's accounting records.
- An internal whistle-blowing procedure. This has already been rolled out at SNCF.
- A disciplinary procedure. This has already been rolled out at SNCF.
- An internal control and assessment system for any measures implemented, based on internal control actions.

3.4.3 Data possession and confidentiality risk

Personal data

SNCF Réseau has an Information Technology and Civil Liberties correspondent who works with SNCF EPIC. This correspondent ensures compliance with the rules governing the protection of employee, client and supplier personal data.

In 2016, the Ethics and Conduct Office, in coordination with other SNCF EPIC correspondents, developed a specific compliance programme in order to guarantee employee data protection. It consists in identifying the employees with access to a HR data processing application and their rights. The second phase is to have each eligible employee sign a confidentiality agreement specifying the legal obligations inherent to his or her duties. The roll-out of this programme is managed by the SNCF EPIC human resources and cohesion division.

In accordance with the new General Data Protection Regulation (GDPR), a data protection officer is appointed and will ensure that SNCF Réseau complies with all the requirements imposed by the regulation.

The new General Data Protection Regulation (GDPR – EU Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016) requires the implementation of technical and organisational measures and provides for fines of up to 4% of global revenue. It will therefore have a significant impact on current practices as well as on the safeguards and evidence to be provided. It is set to come into force on 25 May 2018. As from 2017, an initiative was launched to comply with this regulation (mapping of treatments, new clauses in subcontractor agreements, new information requirements, project team awareness-raising, etc.). In addition, a Data Protection Officer will be appointed in early 2018 (to replace the correspondent) and ensure compliance with the new requirements arising from the regulation within SNCF Réseau.

> Confidential data management plan

SNCF Réseau is required to protect economic, commercial, industrial, financial or technical information which, if disclosed, could breach non-discriminatory competition and nondiscrimination rules imposed by law. In accordance with Decree 2015-139 of 10 February 2015 on the confidentiality of data held by rail infrastructure managers and the French rail transport system ethics committee, SNCF Réseau adopted a confidential data management plan in 2017, after consultation with employee representative bodies and the approval of ARAFER. The plan was rolled out by training managers and informing the relevant employees. Documents proving that they understand the plan's provisions are currently being collected.

Information on the safety of individuals or information systems

SNCF Réseau ensures the confidentiality of all information which, if disclosed, could jeopardise the safety of individuals or information systems. This mainly involves information which SNCF Réseau holds as an operator of vital importance. Among the measures adopted was the marking of documents in accordance with the internal benchmark RA00110 and the CISO's cybercrime risk warning for SNCF Réseau.

Information constituting industrial and commercial secrets

In order to protect all information constituting industrial and commercial secrets, SNCF Réseau has bolstered its information-based asset protection policy by automatically signing individual confidentiality agreements or commitments with its partners or service providers.

3.4.4 Internal control organisation

Financial and accounting internal control covers the processes that update accounting data: production of financial information, accounts closing and reporting actions.

The scope of the internal control procedures relating to the preparation and processing of accounting and financial information includes the parent company and all the subsidiaries in the consolidated financial statements. The control procedures are adapted to the size and activities of the various entities.

Framework used

Like the other State-owned institutions in the PRG, SNCF Réseau decided to adopt the reference framework published in January 2007 and updated in July 2010 by the AMF.

> Coordination of the internal control strategy

An internal audit committee, comprising the EPIC SNCF Audit and Risk Department and the financial managements of SNCF EPIC, SNCF Mobilités and SNCF Réseau, meets three times a year to determine internal control objectives and make sure that they are met. The Finance and Purchasing Directorate coordinates the internal control strategy for SNCF Réseau. Under this strategy, SNCF Réseau is first and foremost responsible for its internal control, including within its subsidiaries. It uses the AMF reference framework.

The list of control points covers all the processes shown in the AMF reference framework application guide as well as various "control environment" components.

An internal control tool common to the three EPICs is used to conduct self-assessments among all SNCF Réseau components. Around one hundred entities were required to regularly self-assess their process control. In 2017, control of industrial and railway investments, certain human resource process phases, accrued expenses, taxes and duties other than income tax, and the Single Payment Portal application were assessed for the SNCF Réseau scope.

Based on the results, and in line with the process benchmarks, collective and individual action plans were defined and identified best practices were made available. Around twenty visits to entities (including accounting units) were also made to validate the roll-out of the action plans.

3.5 LEGAL AND REGULATORY NON-COMPLIANCE RISKS

3.5.1 The Legal Affairs and Compliance Department

The Legal Affairs and Compliance Department ensures that the company complies with all future measures and legal obligations and that they are properly coordinated. It works in conjunction with the various departments involved in risk control, namely:

- in the public procurement sector by preparing the files submitted to the Procurement Contract and Purchasing Committee which it occasionally attends.
- with the assistance of the Regulation Division, it rolls out the confidential data management plan and prepares files for ARAFER and the Ethics Committee.
- it acts as the Ethics and Conduct Office interface for the implementation of the compliance programme required by the Sapin II law with regard to anticorruption and influence peddling and verifies the progress;
- it coordinates the measures to be undertaken with the Haute Autorité pour la Transparence de la Vie Publique (French Authority for Transparency in Public Life) with regard to interest representation.
- it undertakes the measures to ensure compliance with the EU regulation for the protection of natural persons as from its coming into effect on 25/05/2018.
- it ensures that delegations of authority within SNCF Réseau are valid and updated.

3.5.2 Procurement contract quality and control department

Reporting to the Group Legal Director, this department draws up preliminary opinions for the SNCF Réseau Board of directors and the Chairman and managers of EPIC Réseau (files examined by the Procurement Contract and Purchasing Committees (COMA) and for contracts whose approval is subject to the prior opinion of the Head of the *Mission de contrôle économique et financier des transports* (Department of Economic and Financial Control for Transport) for procurement contracts, sales of aged materials, equipment and leasing. It also ensures that the procedures for allocating a procurement contract or other agreements are fair, the financial terms and conditions obtained are acceptable and the contract clauses maintain the prerogatives of the various EPICs.

3.5.3 Risk reduction strategy

In addition to the property damage insurance scheme (see 3.5.4 Insurance policy), SNCF Réseau set up a strategy in conjunction with its main insurers to reduce damage based on targeted visits to relevant railway sites; these visits are organised with the company's network of "risk" officers and bring together representatives from the entities that occupy the premises and those in charge of their operation and maintenance.

The Risk Management Division has also developed a methodology (BIA – Business Impact Analysis) to determine financial repercussions such as impacts on rail traffic arising from the unavailability of technical facilities supporting the French national rail network, and more specifically within a dense zone; later this is to be applied to other types of site.

It has served as a basis for interventions carried out since 2017 within the scope of the unified infrastructure manager, SNCF Réseau, as enacted in the Law of 4 August 2014.

3.5.4 Insurance policy

In a bid to control insurance costs while improving guarantees, the Group grouped together its insurance purchases for the benefit of the new Public Rail Group (PRG) components, as provided under Article 5 of Decree no. 2015-137 of 10 February 2015.

Because of the insurance policies extended to all the structured entities in connection with the rail reform laws, SNCF Réseau has coverage for the major risks that implicate its civil liability or impact its property and for the operating losses arising from damages to its assets or rail infrastructure. It is also covered for its high-speed line trials as part of a specific trials all-risk policy.

SNCF's main insurance programmes are as follows:

- The "Major Civil Liability Risk" programme
- The "Automotive Fleet" programme
- The "Buildings" programme
- The "Property Damage" programme

The Risk and Insurance Department is incorporated within the Legal Expertise Centre of the Group's Legal Department so that insurance policy purchases can be pooled for the entire Public Rail Group.

On behalf of SNCF Réseau, the inter-regional property insurance centres incorporated within the regional legal delegations of the Group's Legal Department and managed by the Insurance Department are responsible for the amicable settlement of claims, and serve as the main intermediaries for insurance matters within their geographical scope.

3.6 INTERNAL CONTROL SYSTEM SUPERVISORY AND MONITORING BODIES

3.6.1 External supervisory bodies

- French State supervisory bodies

By virtue of its status as a public institution, SNCF Réseau is subject to the economic, financial and technical control of the French State.

Administrative and technical control is the responsibility of the departments of the French Minister of Transport; economic and

financial control is the responsibility of the Department of Economic and Financial Control for Transport on behalf of the French Economy and Budget Ministers.

<u>Government Commissioner</u>: he makes sure that SNCF Réseau's general policy is defined in accordance with the company's missions and makes observations, as he sees fit, on the compliance of the Board's deliberations with the general guidelines of the policy approved by the French government. These duties are carried out within SNCF Réseau by the Director of Transport Infrastructures.

Department of Economic and Financial Control for Transport: this department's role is to provide economic and financial information, advice and supervision to SNCF Réseau and its subsidiaries. It is based in the SNCF Réseau head office. The department is headed by a member of the French General Inspectorate of Finance.

The company also falls within the scope of investigations carried out by the French General Inspectorate of Finance.

- Independent authorities

The SNCF Réseau management accounts are examined by the French Court of Auditors in accordance with Articles L.111-4 and L.133-1 of the French Financial Jurisdictions Code. An audit was carried out in the second half of 2017. The report will only be presented in the third quarter of 2018.

Law 2014-872 of 4 August 2014 specifies the role and duties of the EPSF (French Railway Safety Authority) and ARAFER (French Railway and Road Regulation Authority):

- The company is subject to operational controls performed by EPSF, set up by the amended Law 2006-10 of 5 January 2006 on transport safety and development
- The company is also subject to the supervision and sanction of ARAFER. Created by the Law of 8 December 2009, the French Railway and Road Regulation Authority (ARAF) that became ARAFER under the "Macron" Law of 6 August 2015 is responsible for ensuring that the public service and rival rail and road transport activities run smoothly for users, passengers and shippers. Its duties are threefold:
 - o ensure that rail operators have fair and nondiscriminatory access to the network and service facilities (stations, marshalling yards, sidings, freight yards, other services)
 - help make the rail system more efficient in terms of service quality, safety and costs, with a control over pricing (approval)
 - o help control SNCF Réseau's economic equilibrium by issuing its opinions on the multi-year contract, the annual budget and the financing of projects costing more than €200 million.

Given the growing importance of regulations within the company, its executive management is faced with major challenges. A regulation committee, combining the Chairman and members of executive management since 2017, regularly deals with major regulation issues.

Relations with the regulator are constantly managed by a dedicated entity that is clearly identified and recognised in this field, the Regulation Department, which reports to the Network Access Directorate. It facilitates and coordinates relations with the regulatory authorities (ARAFER and, where necessary, the *Autorité de la concurrence* (French competition authority)).

The law also created a new body to supplement the institutional environment in which the PRG operates, the *Haut Comité du système de transport ferroviaire national* (French High Committee for the Rail Transport System), responsible for informing and consulting with stakeholders on the major challenges facing the French national rail transport system. The High Committee members were appointed by the order of 10 December 2015. This committee met under the chairmanship of the French Secretary of State for Transport in September 2016 and analysed the strategic guidance report stipulated in the rail reform law.

- The Statutory Auditors

The SNCF Réseau statutory auditors are appointed, on the recommendation of the Board of directors, by the French Minister of the Economy and Finances, after the approval of the Audit, Accounts and Risk Committee. They certify the accounts and may identify during the year major internal control risks and deficiencies likely to a have material impact on accounting and financial information. Each subsidiary is audited by at least one of the SNCF Réseau's statutory auditors.

The six-year mandate of PricewaterhouseCoopers Audit was renewed in 2015. Ernst & Young Audit was appointed under a six-year mandate in 2015.

3.6.2 Internal control system in-house assessment bodies

Audit and Risk Directorate:

Internal audit is an independent and objective activity which provides an organisation with an assurance on the management level of its operations and advice to improve this management in the form of recommendations, and contributes to the creation of added value. It assists the organisation in achieving its objectives by systematically and methodically assessing its risk management, control and corporate governance processes and submitting proposals to reinforce its efficiency.

Audit, Accounts and Risk Committee:

The corporate governance issues (composition, attribution, operating procedures) pertaining to the committee are outlined in the report on corporate governance.

3.7 INTERNAL CONTROL AND RISK MANAGEMENT PROCEDURES RELATING TO THE PREPARATION AND PROCESSING OF ACCOUNTING AND FINANCIAL INFORMATION

3.7.1 The role of the Purchasing division

The SNCF Réseau purchasing department is responsible for the transversal management of purchases in the company. It drafts the company's purchasing policy with respect to the 2020 Network corporate plan, particularly its "Industrial policy", and breaks it down into action plans shared with the SNCF Réseau business lines. It also oversees its implementation. It is responsible for managing supplier relations and developing an efficient supplier chain, with legal issues being treated in partnership with the SNCF Réseau legal department.

It consolidates and proposes a company purchasing performance objective that it submits to Executive Management and rolls out within the SNCF Réseau business lines.

The Purchasing department provides support to the company's transversal businesses and functions by managing purchasing processes. It has set up a standard methodology to calculate purchase gains in conjunction with the PRG purchasing department and the SNCF Réseau Performance and

Management Monitoring department. This is used to identify the levers that have contributed to this performance and effectively monitor them in the company's accounts. It greatly contributes to the SNCF Réseau performance plan.

This long-term approach relies on the purchasing department's internal control plan in accordance with the principles issued by the French Financial Markets Authority, from the creation of the need to the final payment stage. The objective is to ultimately enhance the company's economic performance through an improved understanding and control of purchase costs, while legally safeguarding the purchase.

A policy to streamline governance with suppliers, and more specifically the strategic suppliers of the new company, was undertaken and pursued in 2017. It also provides support in terms of methodology with the development of toolboxes for buyers, an intranet, news flashes, guides and databases following the coming into force of the Decree of April 2016 governing public procurement contracts.

The Network's purchasing department continued to implement the Operational Excellence approach adopted in 2016.

It maintains in-depth relations with professional supplier trade unions.

3.7.2 Control and supervision by the Economic and Financial Performance unit

3.7.2.1 General organisation

The "Finance and Purchasing – Management Control" department supports SNCF Réseau's departments in their management based on the budget approved by the Board of directors and the Company's accounts. Its actions fall within the scope of the Performance Contract signed with the French State for which it drafts the financial trajectory.

It organises and coordinates the management control activity to assess, analyse and monitor the economic and financial performance of the various businesses and productions. Dashboards are examined on a monthly basis by the Executive Committee and on a quarterly basis by the Audit Committee and the Board of directors.

It acts as an methodological expert and reference in economic and financial areas.

Its activity is based on four priorities:

- A methodological or "management framework" priority, whose purpose is to set up in a consistent manner all the management rules applicable to SNCF Réseau and define analysis flow charts;
- A budgetary control and monitoring priority, via a structure tasked with monitoring the Company's activities and commitments, their impacts on its accounts using management control tools (budgetary forecasts, dashboards and management accounting) and a specific tool designed to monitor expense commitments in connection with investment projects;
- An operational management priority, in order to boost the performance of the company's various activities based on the expected performance levels (performance plan).
- A financial issue monitoring priority, based on the creation of the trajectory and analyses of regulation accounting and financial industry reporting

3.7.2.2 "Regulation" accounting

To satisfy the obligations imposed by Law 2009-1503 of 8 December 2009 referred to in section 2.3.1 – External

supervisory bodies -, SNCF Réseau has set up a "regulation" accounting team which distinguishes between regulated and non-regulated activities and breaks down the network into several sub-networks.

Its scope of involvement covers the opinions and publications of the regulator, ARAFER, or disputes of a financial nature as well as the monitoring of economic cost/revenue financial indicators. It calculates the full cost of platform fees per station.

ARAFER is currently monitoring the accounting separation of service facilities coordinated by the SNCF Réseau Finance and Purchasing Department in conjunction with the Regulation Department and business line departments.

3.7.2.3 Budgetary strategy

The projected budget is drafted by the Finance and Purchasing Department and submitted to the business lines and transversal services at the start of the year at the latest.

The monthly accounts form the "reporting" base. It is monitored on a monthly basis, using the management data transmitted by the business line & transversal service management teams and extracted from the constantly enhanced accounting management information system and consolidated in the monthly dashboard submitted to Executive Management.

3.7.2.4 Investments

SNCF Réseau submits an investment programme and the terms and conditions of its annual or multi-annual financing to transport, economy and budget ministers. An investment project is only accepted if financial aid is obtained from the requesting parties to avoid any negative impact on the company's accounts over the investment's amortisation period.

After deliberation with the various authorities, the investment programme is submitted to the SNCF Réseau Board of directors and then, once approved, to each business line.

3.7.3 Accounting and tax standards and procedures

The Accounting Standards and Procedures department assumes the following duties:

- Define the accounting guidance;
- Define the tax guidance;
- Define accounting procedures and methods in accordance with internal control principles and provide the necessary training;
- Provide assistance and advice to the various departments in the operational roll-out of accounting or tax procedures and in the drafting of contracts or other financial arrangements in order to anticipate and/or secure the resulting accounting and tax impacts.

SNCF Réseau has been consolidated for tax purposes within the Public Rail Group since 01/01/2015.

Following the reform, SNCF Réseau overhauled its accounting and management accounting systems in order to build a consistent and uniform system tailored to its new organisation. This work included rewriting all its accounting and tax reporting procedures. It mainly focused on fixed assets, purchases and taxation which are the main headings impacted by the rail reform. It continued in 2016 and 2017 with the drafting of procedures covering grants, sales/customers, the accounts closing process, provisions for liabilities and charges, and the accounting of financial transactions. The initial set of new accounting and tax procedures should be completed in 2018. In 2017, SNCF Réseau also prepared for the adoption of IFRS 9 on financial instruments and IFRS 15 on revenue recognition as from 1 January 2018. It has begun to prepare for the adoption of the new IFRS 16 standard on leases as from 1 January 2019.

In 2017, SNCF Réseau also focused on securing the application of VAT to issued invoices by organising several training sessions for the various contributors to invoice production.

3.7.4 Transaction accounting

SNCF Réseau has adopted a centralised accounting production organisation in order to harmonise methods, ensure accounting quality and facilitate skills enhancement for employees. These activities involve investments and fixed assets, financial transactions, trade receivable accounting and the production of the statutory and consolidated financial statements. Accounting units are responsible for monitoring accounting transactions (purchases, suppliers, inventories).

Transaction accounting records are produced using information prepared by business line divisions (line managers, management controllers, management). To ensure the collection of useful and reliable information and the necessary teaching methods, a procedure was set up by accounting teams to manage closing accounting entries on a monthly basis. It mainly relies on monthly meetings with each division and summary memos by business lines.

The accounting production department organises and prepares accounting information by reflecting the company's business model.

With regard to the shared services mentioned in Article 5 of Decree 2015-137 of 10 February 2015, the SNCF Accounting Shared Services Department, which reports to the OPTIM Services department, has four Shared Service Centres (SSC) common to the three EPICs, each specific to a process and falling under the responsibility of SNCF, that assist the accounting production department to carry out its duties:

- The Trade Payables Accounting SSC obtains and pays SNCF Réseau's external supplier invoices;
- The Expense Claim SSC processes and records on behalf of SNCF Réseau the expenses incurred by employees in connection with their professional activity.
- These 2 SSC implement the risk management approach that is extended to local players and perform certain centralised controls.
- The Payroll Accounting SSC is responsible for recording transactions relating to personnel expenses and social security contributions for all PRG employees. It verifies and justifies the accounting data. In cooperation with the Payroll department, it develops control processes and procedures to deal with scope, accounting entry or information system changes.
- The Trade Receivables Accounting SSC formalises and implements controls relating to the "Trade Receivables" process. Its duties include:
 - o external invoicing and recording of invoices and inventory accounting entries;
 - debt collection, monitoring of legal disputes for a limited portion of SNCF Réseau's activity (availability of personnel, material damage).

As for the entire public rail group, SNCF Réseau prepares the annual and half-year financial statements, based on:

- a pre-closing in May and November, the objectives of which are to conduct a full closing (with production of an income statement, full balance sheet, cash flow statement and statement of changes in consolidated debt) and identify significant accounts closing matters to be processed and recorded at the pre-closing;
- June and December closings, the objectives of which are to prepare a full set of accounts under IFRS and CRC (*Comité de la réglementation comptable*, French Accounting Regulation Committee) regulations, based on the pre-closing and analyses of material changes in June and December;
- for the other months, a monthly closing and a monthly summary memo on the accounts.

The 30 June and 31 December financial statements are presented in detail to the Audit, Accounts and Risk Committee before their submission to the Board of directors.

The procedural reviews carried out by the statutory auditors in respect of prior fiscal years, in addition to the general IT controls on the accounting information systems (mainly Peoplesoft and JD Edwards), focused on matters relating to the company's main account headings that make up non-current assets and financial liabilities.

3.8 ACTIVITIES OF THE FINANCING AND TREASURY DEPARTMENT

The Financing and Treasury department (FTD) is responsible for financing, cash, the financial structuring of major projects and investments as well as financial risk control, while ensuring a proper segregation of duties.

The Financing and Treasury Department manages the company's financing strategy with regard to:

- long- and short-term loans in international capital markets and with its banking partners in order to finance its everyday business and its investments;
- financial risk hedging (interest rate, currency, inflation, etc.), mainly using derivatives;
- management of available cash and investments.

It is responsible for managing the company's financial communications with financial brokers, investors and rating agencies.

Furthermore, the Financing and Treasury Department coordinates:

- the financial arrangement and structuring of major investment projects,
- the acquisition, arrangement and financial structuring of subsidiaries and affiliates.

The FTD also closely monitors all the company's operating flows at all times to limit and mitigate any operating, financial or image risks arising from their execution. It is the contact point for all business lines with any specific request involving a commitment on a potential future cash flow (securities, guarantees, etc.), a contractual risk in terms of cash or any oneoff deviation from the company's reference framework with regard to cash flow or a means of payment. It is the permanent contact for cash flow projections and the organisation of cash flows with subsidiaries.

Furthermore, it contributes to the optimisation of WCR and rolls out a structured Credit Management strategy. It is responsible for invoicing and debt collection involving customers and public co-financing bodies. It actively contributes to setting up efficient tools and organises transversal management dialogue with the relevant business lines to measure and optimise the effectiveness of these processes.

Finally, the FTD is also responsible for:

- monitoring financial risks;
- complying with financial legislation and regulations, in conjunction with the Legal Department;
- monitoring the quality of the financial information disclosed internally and externally;
- and finally ensuring the security of its information systems.

It monitors SNCF Réseau's financial risks (interest rate, currency, liquidity and counterparty risks), verifies compliance of transactions with the authorisations granted by the Board of directors and monitors compliance with internal procedures and delegations of authority and signature.

4 SOCIAL, SOCIETAL AND ENVIRONMENTAL INFORMATION

To meet future transport challenges, with a focus on safety, SNCF Réseau develops its activities by incorporating social, environmental and societal concerns, and consulting with its contractual (employees, customers, suppliers, elected representatives) and non-contractual (associations, local residents) stakeholders. SNCF Réseau is therefore creating the conditions required for the responsible modernisation of the French national rail network and its 30,000 km of railway lines.

4.1 CSR POLICY AND PRINCIPLES FOR ACTION

SNCF Réseau's CSR policy was drafted in conjunction with all the company's internal stakeholders and is rolled out in all its business lines. It is consistent with the public rail group's sustainable development policy, the Network 2020 corporate plan and the performance contract with the French State.

A powerful transformation lever and creator of meaning and value, CSR gives each employee the opportunity to do something in favour of sustainable development. The CSR policy was prepared in accordance with ISO 26000⁵ and breaks down into 4 challenges, 16 commitments and 3 principles for action.



This policy's objective and the quality of its initiatives were recognised by non-financial rating agencies. In 2017, Vigéo Eiris ranked SNCF Réseau second in a panel of 38 European logistics and transport companies with a 66/100 rating and first in the "rail operators" sub-sector. Likewise, Oekom ranked SNCF Réseau as the number 1 worldwide in the transport infrastructure management sector with a B- rating.

	2017 rating	Position	2016 rating
Vigéo	66/100	2nd in a panel of 38 companies	49/100
Oekom research	B-	1st in a basket of 45 companies	C+

This policy is at work every day in many different ways, from project eco-design and biodiversity protection, to the circular economy, reducing greenhouse gas emissions, consulting with regions, responsible purchasing and gender equality initiatives. All these initiatives, described in this section, reflect our commitments to responsible modernisation.

4.1.1 Responsible governance

By virtue of its status as a public institution, SNCF Réseau is subject to the economic, financial and technical control of the French State. The Board of directors defines the company's policy and oversees its implementation and the Executive Committee coordinates the roll-out of the company's strategy across its operations. The company provides a fully transparent account of its decisions, especially by publishing Board of directors' decisions in the *Journal Officiel*.

The report on corporate governance sets out in detail SNCF Réseau's governance and management compensation.

INDICATORS	2017	2016	2015
Number of times the Board of directors met			
during the year	8	9	12

4.1.2 Openness to stakeholders

As a public sector company with a general interest purpose, SNCF Réseau is at the service of railway undertakings, passengers, local residents, elected representatives, environmental associations, users, its staff, suppliers and its financial partners, etc. Its aim is to be attentive to the expectations of all its stakeholders.

In 2016, SNCF Réseau oversaw the development of a materiality matrix in order to identify the CSR issues most relevant to the company and its stakeholders, holding interviews with various contacts and carrying out a major survey with a representative sample of 4,500 employees and external stakeholders: 70 customers, 500 suppliers, 560 regional and departmental councils, 200 associations and 24,000 municipalities impacted by railways.

Materiality matrix of CSR policy challenges:



The survey led to the creation of a matrix presenting 16 CSR policy challenges based on their importance for employees (horizontal axis) and external stakeholders (vertical axis).

Three safety challenges (work, network traffic and people) emerge as the most important for SNCF Réseau. At the other end of the spectrum, four issues are ranked of minor importance: solidarity purchases and regional dialogue for employees, and noise and management for external stakeholders.

This 'materiality' matrix is used to make SNCF Réseau's strategy more robust and more appropriate, leaving it free to focus its efforts on the priority challenges. It also provides the opportunity to engage in a strategic dialogue with our key stakeholders and listen attentively to weak signals and emerging stakeholders.

⁵ The international ISO 26000 standard was published in 2010 to provide guidelines for CSR management. It cannot be used for certification purposes but can clarify the notion of corporate social responsibility.

4.1.2.1 Customer satisfaction: improve network access

Improving the service in respect of customers (railway undertakings and authorised candidates) is a major challenge for ensuring the continuity of the French rail transport system. It is rooted above all in the quality of responses to train path orders and then passed on to traffic management processes.

This service quality approach is accompanied by the setting of objectives and the measurement of the degree of customer satisfaction. The results of the 2017 survey were shared with all customers.

Existing incentives for both the infrastructure manager and train path applicants were renewed in 2017:

- The **reciprocal incentive scheme**, established in 2015, sanctions railway undertakings and/or the infrastructure manager for any modification or cancellation of confirmed train path-days based on confirmed train path-days allocated in the service timetable. It was renewed in 2017 in a more industrialised manner covering the entire service schedule;
- the Performance Improvement System, an incentive measure that sanctions the infrastructure manager (IM) and/or railway undertakings (RU) responsible for irregularities resulting in traffic delays (penalties are based on the number of minutes lost per 100 km);

INDICATORS	2017	2016	2015
Number of minutes lost per 100 km by			
RC:			
- for IM reasons (min)	1.37	1.39	1.29
- for RC reasons (min)	2.13	2.09	2.05
Capital expenditure to improve			
reliability (€ million)	36	44	26

- the framework agreements under which the infrastructure manager undertakes to allocate a commercial capacity, defined upstream, to a customer that agrees to order it, with a system of penalties based on the reservation fee in the event of default;
- the train path quality agreements (TPQA) under which the infrastructure manager undertakes to eliminate uncertainty within a defined timeframe on a pre-determined list of train paths.

As the owner of platforms and platform accesses (walkways, underground passages, stairs, etc.), SNCF Réseau is responsible for providing access to trains from public spaces and its pricing in nearly 3,000 stations and stopping points on the French national rail network. As part of the service quality improvement initiative, investments continue to improve accessibility for people with reduced mobility. SNCF Réseau's scope in railway stations represents an investment of over €300 million per year and annual operating expenses of more than €70 million (cleaning, maintenance of lifts and escalators, everyday maintenance of platforms and shelters, snow removal, etc.). In return, it generates platform fees of around €120 million for more than 40 million train departures, i.e. an average of €3 per train departure.

- Accessibility for persons with reduced mobility

By Order 2014-1090 of 26 September 2014, SNCF Réseau is committed to drafting a national master plan (SDNA) and 20 regional accessibility master plans (SDRA). This accessibility agenda is planned until 2025 for an estimated budget of just over \notin 2.7 billion.

Out of the 720 stations and stops identified in the SDNA and SDRA, 562 railway stopping points have yet to be made accessible. A total of 22 were completed in 2015 and 44 in 2016.

The programme continued in 2017 with the ramp-up of studies initiated following the gradual signing of financing agreements, and projects coming to completion.

INDICATORS	2017	2016	2015
Number of stopping points made accessible			
at national level	34	44	39
Capital expenditure to improve accessibility			
(€ million)	142	132	131

Lastly, at the request of the French Minister of Transport, to ensure transparency on the maintenance operations carried out on the French national rail network, SNCF Réseau makes weekly updates to an interactive map on its website that gives information to railway undertakings as well as travellers on the work and maintenance operations scheduled on each line for the following week.

INDICATORS	2017	2016	2015
Traffic in train.km (M T.km)	476	470.8	497.8
Freight traffic from railway undertakings other than Fret SNCF			
(%)***	52	49	44
Passenger traffic from railway undertakings* other than SNCF (%)***	4.8	5.2	4.6
	4.0	5.Z	4.0
Satisfaction rating for railway undertaking customers (out of 10)**	5.5	n.a.	5.5
Generic window consumption rate (%)	88.8	84.9	85.5

*Including the Thalys and Eurostar subsidiaries

**Biennial satisfaction survey

***2015 and 2016, data in T km. For 2017, data based on infrastructure fees

4.1.2.2 Supplier partnerships: responsible purchasing

SNCF Réseau has implemented a responsible purchasing policy that relies notably on CSR supplier assessment via EcoVadis and the inclusion of CSR criteria in supply, work and service contracts. This policy has been rewarded by the renewal of the "Responsible Supplier Relations Label" for each of the last three years, illustrating genuine progress in the following areas:

- respect for the interests of suppliers and subcontractors;
- the impact of purchasing on economic competitiveness;
- the inclusion of environmental and social factors in purchasing processes;
- the conditions ensuring the quality of supplier/subcontractor relations measured every year by the SME Pact supplier survey. For 2017, SNCF Réseau was awarded a 70/100 rating.

In 2017, SNCF Réseau organised its 4th national supplier convention as well as 3 regional conventions. Such events offer a wealth of exchanges with suppliers. Similarly, 4 regional success workshops were organised to share improvements for safety, particularly work safety, with our suppliers.

SNCF Réseau has also modernised its dialogue with professional channels. In 2017, SNCF Réseau decided to adopt

the EDMA⁶ rating (quality and safety) when allocating railway procurement contracts. This initiative shared with the *Syndicat des entrepreneurs de travaux de voies ferrés* (SETVF or French union of railway contractors) developed our suppliers' understanding of these matters. To date, over 2,500 sites were rated, i.e. a total of 62%.

INDICATORS	2017	2016	2015
CSR performance of SNCF Réseau suppliers (average rating over 100 EcoVadis evaluations)	54	54	51

4.1.3 Ethics as a basic corporate value

Given the importance of ethical compliance, both for the development of its employees and its technical, financial and economic performance, the SNCF Group created a Group Ethics Committee. SNCF Réseau verifies that appropriate measures are taken to ensure that its employees understand, adopt and comply with the principles set out in the ethics charter. This charter highlights five ethical values adopted by Group employees - integrity, responsibility, respect of the individual, trust and courage - as well as eleven principles of conduct.

SNCF Réseau has a network of "Ethics" officers, which proposes a whistleblowing procedure and raises employee awareness.

INDICATORS	2017	2016	2015
Number of whistleblowing incidents at the Ethics and Conduct Office concerning SNCF Réseau	25	16	na

4.2 SAFETY CHALLENGE: SECURE A HIGH LEVEL OF NETWORK SAFETY, THEREBY CONTRIBUTING TO RAIL SYSTEM SAFETY

Securing the highest level of safety for traffic and persons on the national railway network is one of the company's major commitments. SNCF Réseau lays down and manages network security policies that translate into three basic requirements⁷:

- ensure, in respect of network design, modernisation and maintenance, infrastructure usage conditions that enable railway undertakings to operate in complete safety;
- provide railway operators with reliable and suitable information on how to use infrastructure, as well as operating logs, so that they can take them into account or implement them in the safety procedures incumbent upon them and in the transport services that they provide;
- ensure the safety of users, personnel, third parties, transported goods and the environment by the drafting and implementation of the necessary procedures and means, both in the operations, tasks and processes performed by the company, and in the use of external service providers or in the acquisition and commissioning of material and equipment.

SNCF Réseau has made safety its number one value. Its approach, called "PRISME", is aimed at achieving "Safety Excellence" through a six-pronged transformation concerning

the safety of railway operations, that of its own employees and the employees of subcontractors:

- promote *P*roactive behaviour aimed at allowing each employee to make an effective contribution to the continuous improvement system by alerting his or her managers to any incidents or precursor events of which he or she is aware;
- install **R**isk-based management to prioritise actions and focus energies;
- master the Interfaces between entities to promote a safety chain in which each link is essential and connected to the others, including partners and subcontractors;
- **S**implify procedures and documentation to ensure their routine application by operators;
- create **M**anagerial conditions under which each employee can play a personal role through his or her actions and decisions, at his or her level of responsibility, to reduce risk of accident as much as possible (severity and frequency);
- develop the most innovative tools and *E*quipment to offer each employee a safe work environment and secure technological means.

The 2017 – 2026 multi-year contract between the French State and SNCF Réseau, signed on 20 April 2017, provided SNCF Réseau with guidelines to guarantee a high level of safety for persons and goods on the network. The contract provides for maintenance to be improved to reach this level in all network lines, while sustaining the required skills and tightening quality requirements for operations.

Human and organisational factors should be more effectively considered, from the design to the commissioning of facilities, as well as in daily network management operating processes and procedures to enhance the safety culture.

Simplifying technical requirements should reduce the number of documents, improve their consistency and facilitate the understanding of requirements by operating players and the roll-out of procedures.

Network surveillance should also rely on new technologies (onboard systems or fixed sensors).

Finally, the policy of risk reduction at level crossings and track crossings for pedestrians will be pursued by improving the current structure and removing the most dangerous track crossings.

4.2.1 Ensure that our work sites are completely safe

Safety is SNCF Réseau's priority. Prevention is central to the measures taken by the company, its goal being to reduce accidents, particularly on work sites, involving all SNCF Réseau employees and subcontracted personnel. The company aims to reduce the rate of accidents with work stoppage (between 2015 and 2020) by half.

This commitment, confirmed in the PRISME programme, proved successful as from 2016 with a 5% reduction that year. In 2017, the reduction should be nearly 15%. Furthermore, the number of accidents involving employees from external companies is a major focal point to help them with this improvement.

In the spring of 2017, SNCF Réseau organised a national tour of the safety train which was visited by nearly 15,000 PRG employees. This event helped to renew risk awareness and bolster the safety culture.

⁶ EDMA: Multi-axis dynamic assessment

⁷ Further information on SNCF Réseau's safety policy is available at: http://www.sncf-reseau.fr/fr/a-propos/notre-strategie/renforcer-lasecurite

In 2017, SNCF Réseau published its life-saving rules. These are a set of key rules designed to maintain individual integrity that each person within the company must observe. They were deployed among all employees and are a means of improving protection against the most common major risks.

In addition to these rules, measures are planned for 2018 involving co-activity and the use of machinery.

More generally, SNCF Réseau is committed to improving safety for service providers, by setting safety objectives and at the same time raising their awareness.

INDICATORS	2017	2016	2015
Frequency rate of workplace accidents with lost			
time excluding commuting (%)*	9.78	11.22	11.67
Severity rate of workplace accidents (%)*	0.475	0.505	0.485
Number of occupational illnesses reported *	131	54	136
Number of fatalities			
- SNCF employees	1	4	4
- subcontractors	5	1	2
Number of serious injuries			
- SNCF employees	14	16	-
- subcontractors	11	14	-

*For 2017: figures on a rolling 12-month basis at the end of October 2017

For 2016: figures updated over 12 months at the end of December 2016

4.2.2 Offer a safe network to railway undertakings

Sustainable mobility is giving rise to mounting expectations, including the implicit and major expectation that railway operations will be safe.

The number of significant safety incidents (SSI) decreased by nearly 10% in 2017 compared with the previous year. Improvement efforts are ongoing as part of the PRISME approach, which promotes an extensive and shared effort to consolidate safety culture across the company as a whole, and specific action plans.

With regard to safety, SNCF Réseau actively engaged in dealing with all malicious acts which impact the traffic production or safety. Despite the reduction in metal theft over the past several years resulting from the work carried out with French government services, the year 2017 was marked by an upsurge in this activity. This was partly due to a significant increase in raw material prices, particularly copper. Furthermore, the steadily increasing intrusion on the French national rail network (+16% as at 31 October 2017) still has a major impact on rail production, over and above the security and safety consequences.

INDICATORS	2017	2016	2015
Risk value for travellers (weighted number of fatalities and serious injuries per million			
km.train)*	0.003	0.007	0.011
Number of noticeable safety incidents			
attributed to SNCF Réseau **	140	152	188
Number of malicious acts involving SNCF Réseau property and financial assets ***			
Reseau property and infancial assets	17,730	16,086	15,931
Total safety investments (€ millions)	120	93	101
*For 2016: figures updated		"	

**For 2016 and 2015: updated figures including "other causes"

***2016 scope redefinition and 2015 update

4.2.2.1 Network operations: safety and reliability challenges

Railway safety remains SNCF Réseau's top priority and it is extremely vigilant when it comes to handling safety incidents. Under the PRISME programme - launched in 2015 - which aims to attain safety excellence and make the company an

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international reference, SNCF Réseau rolled out a vast managerial support and investment policy. During the year, over 1,000 safety managers were trained in analysing local risks so as to reinforce the prevention of incidents, mainly by training operators. This change in managerial methods included new tools designed to better train operators or enable them to roll out procedures more effectively among line staff.

Considering the ramp-up in engineering work and the increase in the number of incidents (catenary breakages, signalling disruptions, etc.) since the start of the year, particularly in Ilede-France, network performance is difficult to maintain, as demonstrated by the Performance Improvement System IM indicator, which overall remained stable at 1.37 min/100km for the 2017 service timetable compared to 1.38 for the 2016 service timetable, below the annual target. The Performance Improvement System IM punctuality indicator represents the number of minutes lost by all Railway Undertakings (RU) due to the Infrastructure Manager (IM) in relation to 100 km covered by these RU*. To improve rail system punctuality, SNCF Réseau set up a punctuality management modernisation programme based on operating excellence methods and the new "Reliability observation" tool. These new methods and tools were rolled out across the entire network in the second half of 2017.

At the same time, SNCF Réseau has pursued its ambitious Operational Traffic Management Modernisation project. It should improve punctuality for all railway undertakings, major incident management, passenger and shipper information, thereby benefiting all railway sector stakeholders.

*It includes external causes (malicious acts, suicides, most adverse weather and strikes)

4.2.2.2. Network maintenance: safety and innovation

Besides the climate, labour, local and general events which disrupted 2017 production, network maintenance was overall sustained thanks to the constant availability of teams. However, it was carried out in a context of ageing facilities, despite substantial renewal measures, mainly focusing on the section with the most traffic on the network. A substantial amount of maintenance work was accordingly performed in 2017, with efforts increasing in certain fields and geographical areas.

The measures undertaken in 2017, that will continue in 2018, focused more specifically on:

- the carbon footprint of network renewal and development projects;
- "tightened" maintenance operations, in line the importance placed on safety within the company;
- the continued deployment of automated surveillance and supervision, with more and more inspections using measuring and recording devices instead of inspections on foot. This is one of the objectives set out in the Performance Contract;
- ongoing enhancement of vegetation management operations, and the roll-out of actions plans in forthcoming years in a future context where certain currently used products will be banned.

Maintenance production is generally performed with varying observations depending on the different techniques; for sizeable operations, the situation is as follows:

 on tracks, 14,526 rail sections were replaced, a slightly lower volume than in 2016. This is partly due to the implementation of head wash repair (HWR), which prevented defects that would have led to the replacement of rail sections; furthermore, the number of tightened maintenance operations on B families of line crossings in response to the accident at Brétigny reached its optimal threshold;

- in the field of signalling, compliance with intervention times for the preventive maintenance of facilities improved significantly, and work continued on signal bungalows scheduled in the wake of the Denguin accident (summer of 2014). More than half of bungalows were protected against rodents at the end of 2017;
- clearing operations remained at a high level, mainly within the outsourcing policy, with mechanical means now given precedence over chemical means.

The roll-out of a Lean management optimisation approach, as well as innovations, particularly in IT tools and technical processes, contribute to maintaining a stable performance in the primary network. Examples are numerous:

- the development and deployment of computerassisted maintenance management software (CMMS) is continuing according to a specific schedule;
- machinery designed to automate and modernise network supervision is now being used across the primary network, mainly on UIC lines 1 to 4 under the SURVEILLE plan (inspections using machinery to replace inspections by foot), resulting in 2017 in scheduled inspection work by machinery on 97,760 km of tracks, making up for a substantial reduction in inspection visits carried out on foot. For 2018, the track distance will increase to 97,900 km;
- digital transformation continues within maintenance activities: in 2015, operators and supervisors responsible for network surveillance and maintenance received 13,700 tablets et phablets and were gradually offered new applications designed to improve the input, analysis and traceability of their maintenance operations. Their development will continue and be extended in 2018. In addition, around 10,000 extra phablets and tablets will be supplied in 2018 to all users of the new applications deployed in the SPOT and OSMOZE CMMS projects.

4.2.3 Reduce accidents involving third parties

While traffic is safe on the network as a whole – rail transport is 51 times safer than road (by number of fatalities) and causes 300 times fewer accidents than road transport (CGDD data dating from 2014^{b}) – safety can still be improved at certain dangerous points. Collisions by trains with individuals on tracks, in stations or on railway lines, even though they are not allowed there, and accidents at level crossings are the two main causes of mortality on the network. In 2017, numbers of fatalities and serious injuries increased compared with 2016, continuing the trend of previous years, due chiefly to a steep increase in the number of deaths at level crossings and collisions with persons unlawfully on tracks, despite continued fencing work, for which SNCF Réseau invested around \notin 6.5 million in 2017.

However, by implementing structural adjustments to level crossings, upgrading pedestrian track crossings and promoting prevention among the general public (partnership with the national level-crossing safety day?), accidents at level crossings have been cut in half in ten years.

To improve the safety of third parties, SNCF Réseau is studying innovative solutions (motion detector at level crossings, antiintrusion mats, etc.).

In 2017, SNCF Réseau strengthened its prevention efforts among migrant populations by joining forces with Médecins Sans Frontières, the Red Cross, La Cimade, France Terre d'Asile, Utopia 56, Forum réfugiés, UNHCR, Caritas Diocesana Ventimiglia San Remo and Save the children. Together, they have designed communication media that take into account migrant specificities and issues. Given the daily difficulties they face, raising their awareness about railway risks is a real challenge.

To help them better understand the risks and dangers, useful teaching aids have been designed, e.g. playing cards. This aid provides a simple visual illustration of railway risks that is easy to understand.

INDICATORS	2017	2016	2015
Weighted number of fatalities and serious injuries per million km.train (CSI)*	0.208	0.182	0.119
Number of accidents involving people on the network (CSI):			
 number of persons killed (excluding suicides and suicide attempts)* 	94	80	54
 number of persons seriously injured (excluding suicides and suicide attempts)* 	58	48	41
- number of suicides*	295	314	302
Number of level crossings registered in the national safety programme that were eliminated	5	5	6
CSI: Common safety indicators			

*2015 and 2016: figures updated according to the annual safety report

- Activity in schools

Under the partnership agreement with the French Ministry of Education, SNCF raises young people's awareness about accident risks and encourages responsible behaviour in public transit. In the 2016-2017 academic year, more than 228,000 young people had their awareness raised by 590 school volunteers, 147 of whom were SNCF Réseau employees.

INDICATORS	2017	2016	2015
Number of school visits	9,342	10,490	9,879
- of which number of visits by SNCF Réseau			
school volunteers	1,599	1,996	1,928
Number of SNCF Réseau school volunteers	147	127	88
Number of young people who received			
awareness information from SNCF Réseau	228,40		
school volunteers (from Sept. to Sept.)	8	246,300	244,317

4.2.4 Secure our infrastructure in the face of climate change

The growing ferocity and frequency of climate events disrupts traffic and significantly encumbers rail infrastructures. The transport sector is potentially the area where the challenges are the highest. Confronted with extreme weather events, the major challenges of SNCF Réseau involve adaptation and improved technical resilience with respect to track, electrical equipment and facilities, and infrastructure such as rail bridges.

Weather impacts on infrastructures are already evident, as is the alteration of train traffic:

⁹ Further information at the website dedicated to road safety at level crossings: www.securite-passageaniveau.fr

⁸ CGDD: General Commission for Sustainable Development

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- rails and catenaries expand during heatwaves;
- cold snaps and frost can damage catenaries, rolling stock and switching systems;
- storms and heavy rain can result in flooding that can damage engineering works, foundational components, the electronic systems and facilities of trains or signalling equipment;
- wind and storms can cause trees to fall on tracks and on the catenary masts that supply electricity to trains, thereby impacting network traffic and safety

To reduce the vulnerability of its infrastructure, SNCF Réseau conducted detailed vulnerability analyses in 2016 and 2017. This involved the identification of critical network technical facilities, particularly in order to map institutions and facilities at risk outside areas exposed to flooding risk. In 2018, improved business continuity plans will be drafted across the country as a whole.

SNCF Réseau is jointly financing a thesis monitored by the Caisse des Dépôts et Consignations (CDC, a public group that invests in development projects in France) Climate Research office, whose aim is to analyse how scientific knowledge on climate change is appropriate for economic policymakers and the role it plays in decision-making in respect of the modernisation of infrastructure.

Percentage of train delays in minutes due to bad weather out of total causes that can be			
attributed to infrastructure management (%)*	13.81	12.54	11.9
Number of business continuity plans (BCP)			
drafted	1	1	1

*For 2016: figure updated

4.3 **ENVIRONMENTAL CHALLENGE: REDUCE OUR** ECOLOGICAL FOOTPRINT AND CONSOLIDATE **OUR ENVIRONMENTAL ASSETS**

4.3.1 Optimise resources and recover materials as part of a circular economy approach

- Managing our resource consumption

Economic and demographic development has increased pressure on raw materials, ecosystems, land, air and water.

The renewal of the elements comprising railway infrastructures results in depletion of the planet's resources, while generating significant volumes of waste that have to be treated.

As such, to help preserve these natural resources, the company strives to optimise their usage, encourage reuse, repair certain items and rethink the products of the future. Internal reuse therefore generates substantial savings in terms of resources (ballast, rails, concrete sleepers, etc.) and logistics (transport, storage, etc.).

A gradual process aimed at reducing water consumption has been deployed, with a step-by-step roll-out of consumption monitoring, and a targeted action programme to detect and correct leakage.

INDICATORS	2017	2016	2015
Quantity of resources purchased, by type:			
- Wooden sleepers (units)	370,60 0	374,24 5	360,00 0
- Concrete sleepers (units)	1.53	1.50	1.34
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- Rails (tonnes)	175,90 4	154,00 0	159,76 5
- Ballast (Mt)	2.3	2.35	2.26
- Copper overhead lines (tonnes)	1750	1,657	2,072
- Paper (tonnes)	n.a.	1,412	1,450
Water consumption of tertiary and industrial sites (M m3)	2.5	2.77	NC

- Our commitment for the circular economy of items removed from tracks

SNCF Réseau has adopted a solid and ambitious circular economy approach in order to industrialize the processes designed to convert waste into resources and create material capital.

The circular economy is also an opportunity to revamp practices through innovation, reconsider relations with stakeholders and the suppliers/service providers eco-system and create regional value.

This approach sets out three main objectives for 2025:

- secure raw material supplies;
- recycle items removed from tracks by associating our industrial suppliers with their reuse and reduce the environmental impact of raw materials;
- be a key circular economy player and become strategic customers for industrial companies.

Based on 3 development thrusts initiated since 2016:

- develop innovative recycling reuse channels in strategic segments (ballasts, wooden and concrete sleepers, rails, non-ferrous metals, etc.);
- secure the traceability of raw material supplies for railway projects;
- create a responsible and innovative business model by giving meaning and assisting the company's employees with this new approach.

INDICATORS	2017	2016	2015
Sales of end-of life materials (€m)*	37.5	27.8	33
Total quantity of hazardous waste produced excluding wooden sleepers and asbestos			
(tonnes)	1768	2,680	2,493
Share of re-used rails (%)	0	3.5	7
Share of recycled rails (%)	100	96.5	93
Share of ballast rapidly re-used (%)	30 to 50	30 to 50	30 to 50
Tonnes of used paper and cardboard collected and returned to industrial circuits	n.a.	1,294	n.a.
Volume of asbestos (tonnes)			
- removed from buildings	n.a.	620	673
- removed from rail installations (signalling)	263	76	40
Volume of wooden sleepers recycled for energy purposes (tonnes)**	67.753	78,303	62.244

*2015/2016: -13% for scrap and -11% for copper price indices **2016: updated figure

4.3.2 Respect natural ecosystems as a common good

- The protection of natural sites

SNCF Réseau is particularly concerned by the challenge of protecting biodiversity. Railway lines can modify the ecological consistency of ecosystems and alter exchanges between species.

Some rail bridges, for instance, act as a barrier to the migration of fish species or sedimentary continuity. This is why there is a

need to modify rail bridges or their side areas to restore ecological continuity of rivers classified as a priority by prefectoral orders. However, the areas alongside railway lines can also support ecological corridors as many species find refuge, pass through or find a favourable environment there at some point in their life. Regarding the amount of vegetation, many species, which are occasionally rare or very interesting, grow beside the railway lines.

SNCF Réseau takes the environment into account in its design studies for railway projects through a repeated process of study and consultation with field specialists, with increasing scales of accuracy. The company's first priority is to prevent impacts on the most vulnerable natural settings. SNCF Réseau strives to incorporate ecological challenges into the major operations carried out on existing structures to make the facilities as transparent as possible.

INDICATORS	2017	2016	2015
Number of restored ecological continuities for water courses out of the 110 that are regulated –			
cumulative	7	6	2

A rational action policy regarding the management of plant life along our rights-of-way

To reduce the risk of accidents due to vegetation along railway lines, each maintenance facility develops a multi-year master plan to manage vegetation that highlights the priorities to be addressed (e.g. dangerous trees) with the help of an appointed vegetation specialist or a competent external organisation (e.g. the French National Forestry Office). These programmes also benefit the environment with a return to open areas that are propitious to biodiversity.

For track and tamper track maintenance, SNCF Réseau uses agrochemicals to meet requirements covering traffic safety and reliability and the safety of personnel, travellers and emergency crews. The zero vegetation target for this scope relates to the need to ensure visibility for train drivers and for road safety (especially at level crossings). It also helps to maintain the platform's draining and elastic qualities.

However, SNCF Réseau is committed to being exemplary in its choice of uses, and tests methods and arrangements aimed at limiting the use of agrochemicals, such as the laying of antivegetation mats under tracks or eco-pasture on the edge of the tracks. The SIGMA application (geographical information system for vegetation management), which lists protected zones covering drinking water catchment areas and nontreated areas, is a decision-making and traceability tool for SNCF Réseau maintenance jobs. Trains, quads and weeder trucks have satellite navigation devices derived from farming applications and adapted to railways. Phytosanitary products are applied by employees who hold Certiphyto certificates, which ensures that they are used properly. Finally, the used solutions contain lower doses that those recommended by the manufacturers.

In March 2017, an innovation marathon was organised with internal experts, the winning teams of the worldwide student challenge, researchers, environmental protection associations, other linear infrastructure managers and other foreign rail infrastructure managers. This marathon led to a sharing of techniques and revealed several concepts and new ideas on alternatives to using glyphosate, such as laser and UV technologies, sowing techniques and event robots.

INDICATORS	2017	2016	2015
Share of rail installations (NRN, sites) where there are initiatives to reduce or eliminate agrochemicals (%)	3.5	2.97	2.90

- Contribution to knowledge and partnership commitment

In 2017, SNCF Réseau consolidated the partnerships with its key environmental stakeholders.

- The voluntary initiative of transferring ecological data to the national registers was adopted and imposed by the French State through the biodiversity framework act. SNCF actively contributed to a knowledge-sharing seminars organised by and with the French Ministry of the Environment: seminars on the ecological transparency of structures, return of the 2014-17 call for projects, etc.
- A founding member of the Linear Infrastructure and Biodiversity Club, which groups together several infrastructure managers (railways, motorways, energy, and waterways), SNCF Réseau supports research projects in the area of biodiversity. A second 2017-20 call for research projects was launched in cooperation with the French Ministry for an Ecological and Inclusive Transition and ADEME for a total amount of more than €2 million.
- The partnership with *France nature environnement* (FNE or French Federation of Environmental Protection Associations) is ongoing and measures are underway such as the drafting of a common guide on railway noise.
- The national agreement between SNCF Réseau and the French league for the protection of birds was broken down into regional agreements in Ile-de-France and Nouvelle-Aquitaine (SW France).
- The cooperation agreement with professional bodies in the farming sector (FNSEA or French National Federation of Agricultural Holders' Unions and APCA or French Permanent Assembly of Chambers of Agriculture) has been implemented: relations with regional contacts, drafting of a common guide on farming studies, work on compensation, etc.
- The agreement with the French national hunters' federation was signed in 2017 and measures have already been undertaken to preserve biodiversity and improve the management of wildlife close to railway premises.
- Furthermore, SNCF Réseau represents the transport sector on the National Biodiversity Committee.

INDICATORS	2017	2016	2015
Number of management agreements with green			
space managers - cumulative*	44	48	40
Surface area concerned (ha) - cumulative*	192	2,006	1,950

*2017: Excluding Public-Private Partnerships (PPP)

4.3.3 Reduce our greenhouse gas emissions and improve our energy efficiency

Among all the methods for transporting goods and persons across the country, the railway network provides a more sustainable form of alternative mobility, since it is less dependent on fossil fuels. With less than 1% of CO_2 emissions for 10% of passengers and freight transported in France, rail transport is a key contributor in the fight to reduce greenhouse gases.

To accurately measure its contribution to the fight against climate change and in parallel with its first Green Bonds Reporting, in 2017 SNCF Réseau published the methodology used to measure the carbon impact of the rail infrastructure investments financed by its green bonds. This initiative was

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recognised by Socially Responsible Investing players as exemplary for the completeness and transparency of the disclosed information. The calculation method was used to measure:

- the carbon footprint of network renewal and development projects;
- CO₂ emissions avoided by maintaining existing lines or creating new ones.

According to these calculations, the infrastructure investments financed by SNCF Réseau's Green Bonds in 2017 (€1.73 billion) helped to avoid nearly 5.9 million tonnes of CO₂ over 40 years, i.e. the carbon footprint equivalent of 12,000 French people over 40 years.

Moreover, while rail transport is an attractive alternative within the framework of climate policies, it does not dispense the company from working in an effort to improve its energy efficiency and decrease its own GHG emissions.

In 2017, SNCF Réseau launched its Energy policy and formally set out its aim of reducing energy consumption by 20% and carbon consumption by 25% between 2015 and 2025.

To attain these objectives, SNCF Réseau defined short, medium and long-term initiatives.

- Contribution to energy transition

SNCF Réseau supports renewable energy production:

- the company purchases 7% of its total electricity consumption for the railway network in the form of electricity with a "guarantee of origin";
- the company is pursuing its identification of land sites suitable for the production of renewable energy.

By way of example, in September 2017, SNCF Immobilier embarked on the construction of a solar plant on the Surdon site in Orne, which formerly housed a wooden sleeper creosoting business. The company signed a 30-year long-term lease with an engineering company specialising in electricity production from renewable energy. Work began in October 2017 and the plant will be operational by the end of the first half of 2018. It will cover a surface area of 17.5 Ha for a power output of 6.18 MW. Furthermore, in 2014, SNCF Immobilier launched an energy efficiency programme for its property holdings (25,500 tertiary and industrial buildings and 3,000 SNCF stations). The primary objective is to cut energy consumption by 20% between 2012 and 2022.

A programme to replace station platform lights with LED lights is underway.

The 2013-2020 master plan for works trains aims to ensure the consistency of current and future investments in SNCF Réseau's fleets of locomotives and towing equipment. Its objective is to achieve the proper sizing of fleets of works trains, resulting from the better consideration of these resources by the institutions: modernisation of existing equipment with repowering to extend its use, acquisition of new equipment, measurement of tensile energy consumption (fuel and electricity).

In addition to the enhanced environmental performance driven by the modernisation of the diesel fleet (reduction of GNR^{10} consumption, compliance with NOx, HC and PM emission thresholds), a specific proactive initiative has been launched for the renewal of LGV¹¹ rescue locomotives, for which the consultation initiated in 2018 will include a hybrid variant (diesel + battery).

¹¹ LGV: High speed line

With respect to the SNCF Réseau vehicle fleet (15,710 vehicles), France's seventh-largest, the optimisation policy is focused on lowering fuel consumption by replacing 80% of light vehicles with new vehicles with CO₂ emissions below 100g CO₂/km, boosting the deployment of electric vehicles and rejuvenating the fleet to ensure that 90% of vehicles are under long-term leases by 2020. At the end of 2017, the SNCF Réseau fleet comprised 177 electric vehicles, i.e. 1.1% of its total fleet. A new "Electric and Hybrid Vehicles" call for tenders will be launched to expand the possibilities of purchasing low emission vehicles. A project to equip vehicles with telematic control units is being analysed in order to optimise fleet use and consider vehicle pooling solutions.

SNCF Réseau continues to roll out its eco-driving programme for service cars, locomotives and towing gear, and works trains.

INDICATORS	2017	2016	2015
Electricity losses specific to the electrified rail network (GWh)*	673	747	770
Share of electric traction trains in circulation, all railway undertakings combined (%)	78	78	76.9
Energy consumption of tertiary and industrial site buildings:			
- electricity (GWh)**	326	342	86.5
- gas (GWh)**	141	133	33.5
Fuel consumption of the vehicle fleet (M L)	18.5	18.7	19.1
Fuel consumption of works trains and locomotives (M L)	11.0	11.9	11.6

*For 2017: decrease in loss rate from 10% to 8.5% at the request of ARAFER in its opinion on the 2017 service timetable **For 2015: 6-month data due to the reform

- GHG emissions of SNCF Réseau and the rail system

SNCF Réseau has confirmed its plans to measure the carbon impact of its network renewal and development work. In 2017, the company carried out a new carbon assessment on a Ballast Track Renewal operation (40 km of all-in-one track removal units) between Gevrey and Sennecey in Burgundy. SNCF Réseau's short-term goal is to extend this carbon assessment to all its infrastructure work.

Furthermore, the company's circular economy approach, including the reuse of items removed from tracks (rail, ballast, sleepers, etc.) and the design of the materials of the future contributes to its GHG emission reduction targets.

INDICATORS	2017	2016	2015
Total GHG emissions of the SNCF Public Rail			
Group (scope1+2) (kt eq CO ₂)	1,056	1,056	1,056
Total GHG emissions of SNCF Réseau			
(scope1+2) (kt eq CO ₂)*	170	176	154
Tonnes of CO2 avoided thanks to the rail system			
(kt eq CO ₂)	9,872	9,872	9,872
*For 2016 and 2017: actual consumption figures			

GHG emission indicators are taken from the Greenhouse Gas Emissions Report published every 4 years (Article 75 of the Grenelle II law).

4.3.4 Minimise the footprint of activities on water, air and soil, and control discharges

- Reduction of polluting emissions

To control the environmental risks stemming from its industrial activities, SNCF Réseau continuously monitors its facilities and sensitive sites: Installations Classified for Environmental Protection (ICEP), renovation of electric sub-stations, decontamination and upgrading of service stations.

The Public Rail Group's water policy, rolled out in 2016, aims to reduce the activity's pressure on water resources and aquatic systems. It sets targets for the reduction of water consumption and water discharges generated by industrial activities.

¹⁰ GNR: Non-road diesel

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In respect of fine particle emissions related to the combustion of our diesel-engined vehicles, locomotives and works trains, a master plan for electric or alternative energy conversion should considerably reduce air pollution harmful to public health.

INDICATORS	2017	2016	2015
Total environmental provisions (€m)	167	169	147
Number of environmental incidents	14	18	20
Percentage of industrial sites (EIV, C2MI) to have implemented regular monitoring of discharges			
(%)	88	88	n.a.

4.3.5 Integrate environmental performance into business practices

- Employee awareness-raising and training regarding environmental challenges

SNCF Réseau's employees are regularly informed of sustainable development issues through regular specific articles in the company newspaper, on the intranet site and social networks and in published "reflex action sheets" on high-impact issues and the Responsible Activity Report published for the first time in 2017.

Environmental training targets such areas as the basics of the industrial environment, environmental law, installations classified for environmental protection (ICEP), waste, EMS, environmental audits (based on ISO 14001), internal IT tools devoted specifically to the environment, as well as the protection of nature, water laws, administrative procedures, consultation and specific training on railway noise.

INDICATORS	2017	2016	2015
Number of SNCF Réseau employees trained in environmental issues	124	113	66
Number of training hours for SNCF Réseau employees on environmental issues (hours)	1,233	1,305	529

- Implementation of environmental approaches

With a view to obtaining ISO 14001 certification, SNCF Réseau has undertaken to adopt an environmental approach on its industrial sites. It has also implemented a suitable Environmental Management System (EMS) process covering the standard's key requirements at all of its facilities.

Regarding SNCF Réseau's subsidiaries, at the end of 2016, SFERIS obtained the 2015 version of the ISO 14001 certification. This certification, which supplements ISO 9001 and OHSAS 18001, covers all SFERIS activities, i.e. the production and sale of services involving safety, engineering works, maintenance, operations and intellectual services (professional training, consulting, expert valuation) in rail networks.

In 2017, SNCF Réseau adopted a decisive Eco-design approach for its products, systems and projects mainly in order to enhance its environmental performance over the lifecycle of railway projects while at the same time reducing the ecological footprint.

An initial list of around 30 eco-design projects across the network has been drawn up. The aim is to monitor the performance of these projects and increase their number every year. Certain validation documents for various project phases and methodological guides already include a paragraph on eco-design.

INDICATORS	2017	2016	2015
Number of internal EMS audits carried out	5	4	n.a.

- SNCF Réseau innovation, backed by responsible modernisation

Technological innovation projects are grouped into major cross-cutting themes such as the reductions in the environmental footprint and energy consumption.

Major priority innovation projects are organised to modernise network management and improve the safety, robustness and performance of its operations.

The policy of coordinating a national network of innovation players contributes to extending innovation to regions and its application in local issues.

Innovation at SNCF Réseau also promotes alliances with innovative SMEs and associations, thereby contributing to regional development. Subcontracting to companies from the social and solidarity economy – e.g. job market integration assistance – is also highlighted. Partnerships with associations, promoting "green and social" entrepreneurs, also motivates employees and enables them to be a vector of change within the company.

The SYNAPSE network brings together nearly 300 scientific and technical experts, over half of whom at SNCF Réseau, in order to pool their knowledge and skills, and to allow crossover between disciplines, outside the usual hierarchy. The Sustainable Development cluster is a cross-cutting community of stakeholders that coordinates and drives innovation, and scientific and technical excellence in this field, serving the company's ambitions.

In 2017, the Innovative Department's project accelerator (the Acceleration, Innovation, Disruption programme) has become an important tool in the new system designed to create and support innovative projects.

With this programme and in partnership with start-ups, SNCF Réseau is exploring issues regarding the Internet Of Things, data science, artificial intelligence and paperless processes. For example:

- Analysis of cracks in engineering works using drones;
- Touch screen table enabling several persons to view and enter data at the same time;
- Autonomous chemical or mechanical weeding robot, in response to the ban on glyphosate in 3 years time;
- Digitised maintenance files for 4-axle trains, trains that can run on both rail and road.

INDICATORS	2017	2016	2015
Number of research and applied research			
projects	129	126	99
Number of research and applied research			
projects related to environmental issues	29	21	27
Total research and applied research			
investments (€k)	13,772	12,773	11,900
Total research and applied research			
investments related to environmental issues (\in k)	2,754	2,693	1,300

- The Environmental Authority is guarantor of our business practices in projects

SNCF Réseau is a key project manager within the Environmental Authority of the General Council of the Environment and Sustainable Development (EA GCESD). This independent body, created in 2009, is tasked with:

- deciding whether or not to order an impact analysis for an investment project through a case-by-case review process;

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 issuing an opinion on the quality of impact reviews and information made public on railway project impact studies. Its opinions are published and appended to public inquiry records

INDICATORS	2017	2016	2015
Number of impact analysis opinions issued by the EA	8	18	9
Number of case-by-case reviews filed with the EA	14	24	11
Number of case-by-case reviews resulting in an EA decision not to conduct an impact analysis			
(%)	8	20	10

4.4 SOCIAL CHALLENGE: IMPROVE OUR SOCIAL PERFORMANCE

4.4.1 Make local management central to production

Rail safety, industrial performance and accountability are pivotal to SNCF Réseau's production businesses. With heightened importance being placed on rigour, improved management of the workload of operational supervisors -Facility Manager (FM), Head of Production Unit (HPU) and Local Manager (LM) - is a priority for SNCF Réseau. The managerial transformation, which aims to prepare, support and empower local management, is essential to achieve the industrial performance expected of us.

In line with the deployment of the PRISME and H00 (network safety and robustness) programmes, all SNCF Réseau entities have worked to contribute to the following target: "at least 50% of the working time of operational supervisors ring-fenced for supervision tasks".

- LM availability

An experimental "mentoring approach" programme was implemented from January 2017 for M&T managers in Ile-de-France as part of a broader programme to increase the professional skills of operational managers.

INDICATORS	2017	2016	2015
Time spent on operational management for LMs			
(%)	41.8	39.5	37.6

4.4.2 Foster employability

- Workforce¹²

The SNCF Réseau workforce stabilised (-177) in 2016, with an available workforce (AW) of 53,624 as at 31 December (excluding SFERIS).

Ranked the 6th best recruiter in France in 2017, SNCF Réseau hired a substantial number of new employees (2,832 hirings). This recruitment effort contributes to SNCF Réseau's ability to cope with the volume of work related to major projects, including Greater Paris, and the success of the major challenge posed by generational renewal.

¹² The employee data recorded for SNCF Réseau in the tables

of this section exclude SFERIS

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INDICATORS		2017	2016	2015
Total number of employees (on 31 December) excludin	g work-study students and			
assisted contracts (actual workforce)		54,299	54,476	54,118
	Executives	732	692	547
Breakdown of employees by category	Managers	13,704	13,295	13,358
bleakdown of employees by category	Supervisors	20,584	20,747	20,581
	Labourers	19,279	19,742	19,632
Geographical employee breakdown	Ile-de-France	16,791	16,440	16,421
Geographical employee bleakdown	Regions	37,508	38,036	37,697
	Open-ended contracts	54,046	54,187	53,902
	Fixed-term contracts	253	289	216
Breakdown of employees by type of contract	Work-study students	2,074	2,215	2,170
	Assisted contracts	24	41	92
Total employees by age bracket (5-year intervals)				
- under 26		3,898	4,095	2,811
- from 26 to 30		7,689	7,352	6,564
- from 31 to 35		7,579	7,350	7,013
- from 36 to 40		7,731	7,454	7,211
- from 41 to 45		8,241	8,200	8,130
- from 46 to 50		7,133	6,833	6,808
- from 51 to 55		7,090	8,094	8,366
- over 55		4,938	5,098	7,215
Total number of recruitments (nb of open-ended				
contracts)		2,832	3,086	2,259
- of which permanent status		1,972	2,260	1,775
- of which contractual Number of work-study students recruited under open-		860	826	479
ended contracts		633	702	391
Total number of redundancies (nb of open-ended contr	racts)	151	95	181
Number of employees based on work schedules (A for				
office work schedule and B+C for shift work schedules	Α	8,047	8,115	8,144
including weekends and nights)	B+C	46,252	46,361	45,974
Gross employee benefit expense (€m)		3,440	3,367	3,402
AEC: average employee cost (balance as of 31 Decemb	ber) (€)	62,886	61,786	60,603
Total of the ten highest salaries (€m)*		2.4	2.3	2.7
Sick leave rate (%)		3.76	3.81	3.79
Number of days absence per employee		9.45	9.64	9.4
*2017: increase primarily due to the Chairman's full-yea	rimpost			

*2017: increase primarily due to the Chairman's full-year impact

- Training policy

SNCF Réseau has based its training policy on the railway division's new contractual framework, particularly the Training component of the French National Railway Collective Agreement.

SNCF Réseau's training strategy was prepared in accordance with the Network 2020 plan in order to achieve railway excellence, improve safety, train path quality, punctuality and network robustness.

SNCF Réseau integrates the public rail group's policy with regard to social unity: SNCF Réseau's business lines offer varied and attractive professional careers to all the Group's employees, while striving to improve gender parity.

To better respond to the needs of the institutions and intern expectations, SNCF Réseau has endeavoured to continue revamping the training system as a whole, in terms of its organisation, content provided and teaching methods and tools, while incorporating technological innovation and digital transformation.

Training methods and tools are developed in order to boost technical competencies and transmit expertise while relying on new technologies to assist employees with the switch to digital technology.

This is a key challenge considering the training volumes needed to maintain and transfer competencies in a context of significant generational renewal.

In keeping with its values in terms of apprenticeship, SNCF Réseau has continued to develop its policy regarding work/study courses by improving skill levels in all professional areas. It offers a range of training courses covering professional high school diplomas, advanced vocational training certificates, bachelor's degrees, and engineering degrees. Founded in 1959, SNCF's in-house management school, École supérieure des cadres de l'infrastructure (ESCI), was renamed Sup'Réseau this year. This school is tasked with creating an SNCF Réseau management culture and training top-level line managers.

To achieve these goals, the investment budget allocated to training remained significant in 2017, with over 2.5 million hours of initial and continuous training.

INDICATORS	2017	2016	2015
Number of training hours during the year (thousand h)	2,641	2,472	2,552
Share of payroll dedicated to training (%)	7.65	7.48	6.80

- Labour relations

2017 was a year of transition for labour relations between two years marked by major changes: 2016 saw the set-up of bodies following the 2015 elections and 2018 will be a new election year marked by the implementation of the law reform decrees signed in the autumn of 2017.

Among the agreements signed by the Public Rail Group, the roll-out of the salary agreement involving flat-rate days per year began at the year-end and the telecommuting agreement introduced innovative options.

There were no major strikes involving SNCF Réseau in 2017, the main actions being the inter-professional one-day strikes relating to the law reform decrees signed in the autumn.

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INDICATORS	2017	2016	2015
Number of Public Rail Group agreements			
during the year	4	4	22
Number of strike notices	241	255	199

Incentives and compensation

In 2015, the SNCF Réseau management negotiated an incentive agreement with the unions. It covers the entire workforce for the years 2015-2017.

The agreement reflects the desire to recognise everyone's contribution to achieving the objectives of the EPIC. It is based on achievements in respect of three criteria:

- economic results reflected in the level of operating margin;
- industrial performance using a criterion covering network availability and quality, based on an indicator listing reliability and safety incidents;
- social performance through the quality of work life measured by trends in the level of responses to the Allure internal satisfaction survey.

In 2017, the achievement level for these criteria represented 1.05% of total payroll.

The mandatory annual negotiation roundtable did not result in an agreement between management and the trade unions. Nevertheless, following discussions, management decided to implement several priority measures for employees with the highest compensation in the pay scale.

4.4.3 Promote the access of women to all jobs and fight against discrimination

- Promote professional and gender equality

To break new ground and bolster the policy adopted in the 2015-2018 company agreement, two manifestos promoting professional equality and gender parity were drafted.

The second manifesto, drafted in 2017, was signed by all Executive Committee members and sets out 3 priorities:

- change mentalities and develop an inclusive management culture,
- guarantee professional equality for all employees throughout their career,
- hire women.

All Executive Committee members and around one hundred entity and institution managers have pledged to address and fulfil these ambitions. This demonstrates how management seeks to develop and drive gender equality.

Most of SNCF Réseau's Management Committee took part in the "Gender equality in play" awareness workshop.

SNCF Réseau seeks to increase the proportion of female employees, particularly in technical professions. In 2017, this ratio was still very low among labourers (7.3%), whereas it is steadily rising among supervisors (12% in 2016, compared to 12.6% in 2017) and executives (19% in 2016, compared to 19.9% in 2017). On average, female employees represent 16% of hirings.

Numerous initiatives were rolled out by means of the network of around one hundred gender equality promoters set up in 2016, namely:

- a local Girls Day held to boost representation and encourage women to apply for railway jobs. On 14 December, SNCF Réseau held an open day allowing numerous high school students and young people to get to know its world and professions;
- organisation of conferences, events, and discussions on gender equality for all SNCF Réseau entities as part of gender equality week;
- organisation of think tanks for gender equality promoters;
- creation of men clubs committed to gender equality ("Happy men").

INDICATOR

INDICATORS		2017	2016	2015
	Overall	12.6	12.1	12.0
	Executives	14.5	14	15.0
Proportion of women in total workforce and by category	Managers	19.9	19	18.6
by category	Supervisors	12.6	12	12.4
-	Labourers	7.3	7	7.1
- Proportion of men in total workforce and by category	Overall	87.4	87.9	88.0
	Executives	85.5	86	85
	Managers	80.1	81	81.4
-	Supervisors	87.4	88	87.6
-	Labourers	92.7	93	92.9
Percentage of women recruited		16.2	14.8	13.8
Percentage of men recruited		83.8	85.2	86.2
Ratio of women managers recruited at SNCF Réseau		32.7	39.0	35.1
Ratio of women in governance bodies		35	42	40.0
Ratio of women in operational management (DET, DT)		10.8	11.3	8.3

- Disability and employment

Successful integration is crucial not only for disabled employees, but also for the work collective philosophy and managers.

To further extend the integration process, work has begun to create educational worksheets to answer questions raised by entities on disability rights and duties and disability compensation best practices.

In 2017, the roll-out of the "Hantrain" programme continued and developed in new business lines, offering training and employment to disabled persons. The efficiency and values of this programme were acknowledged outside the company as it was awarded the "BFM Business/1st chance" prize in October 2017.

The various developments in 2017 highlight the diversity of needs and the responses provided. They help improve the expression of competencies, health protection, integration into the work collective and redeployment of disabled workers to positions that are better suited to their situation.

INDICATORS	2017	2016	2015
Number of disabled workers	2046	2,074	2,069
Employment rate for disabled workers (%)	3.64	3.67	3.63

- Inter-generational contract and transfer of skills at SNCF Réseau

Faced with the extensive renewal of its human resources, the transfer and development of employee skills is a major challenge for SNCF Réseau. To help new hires with their integration into the entities, numerous mechanisms were set up and enhanced this year: work/study courses coordinated inhouse, mentoring, co-development, etc.

4.4.4 Ensure the welfare of all at work

- Quality of work life (QWL)

In its "Make Work Life Better" programme to improve work life quality and manage stress, SNCF offers a multi-phased plan whose purpose is to identify risk situations by monitoring indicators such as absenteeism, frequency and severity of workplace accidents, and the number of requests for immediate consultation in connection with working conditions or in individual cases.

- Allure survey

In a context of major transformation at EPIC SNCF Réseau, the Allure survey is a critical part of the regular assessment of employee satisfaction. Half of the Group's employees are surveyed each year. In 2017, 55% of employees surveyed completed a questionnaire covering shared topics and issues specific to certain jobs.

SNCF Réseau strives to boost the initiatives which develop the following themes: Work, Working as a Group, Management, Trust, Commitment and Quality of Work Life (QWL), while promoting the sharing of best practices.

INDICATORS	2017	2016	2015
Score on the quality of work life in the Allure survey (out of 100)	68	67	n.a.
Score on the working conditions question (out of 100)	73	75	n.a.
Score on the work-life balance question (out of 100)	68	69	n.a.

- Prevention of psychosocial risks

The Human Resources department at SNCF Réseau's headquarters has adopted a proactive approach to assess occupational stress among 1,700 head office employees. This stress is assessed using a list of 25 questions for employee groups potentially exposed to the same stress due to their profession (92 groups for 1,700 employees). The anonymous results (verbatim account and improvements) were presented to managers who drafted action plans that were then presented to the Health and Safety Committee (HSC) before being recorded in the Single Document (*Document Unique*). The progress of these measures is followed up at the HSC quarterly meetings. This approach both supplements and interacts with the Allure survey.

- End of career

To facilitate the transition from work to retirement, all employees in the latter part of their careers, with seniority ranging from eighteen and twenty-three years, are offered the possibility of adapting their working hours by means of a gradual termination of activity, on a fixed or gradual scale, over a period ranging from one to three years (with working time of 50-80% of full-time hours), with measures relating to the exercise of a strenuous profession for at least twelve years, or end-of-career part-time work at 91.4% of full-time hours. Furthermore, an end-of-work sub-account of their time saving account (CET) allows them to accumulate up to 250 days so that they can leave the company earlier.

Lastly, the skills sponsorship project, which is open to all employees, offers older workers the option of preparing for active retirement through volunteer work (SNCF Foundation, SNCF Volunteer Association, etc.).

Part-time work

Following the signature of a collective agreement covering part-time work, SNCF Réseau employees can reduce their weekly working time to 50% or 91.4% of the full-time load. The gender equality agreement supports the work-life balance, and fathers or mothers requesting part-time work schedules can expect a positive response.

INDICATORS	2017	2016	2015
Share of part time in the workforce (%)	5.8	5.8	5.8

- Telecommuting

Telecommuting was set up to meet the growing demands of employees to have more flexibility, work autonomy and a better work-life balance.

The agreement of 7 July 2017 introduces a protective framework for telecommuting. It provides employees with a work organisation that improves working conditions by limiting commuting, tiredness, stress and the associated risks.

Even though it requires management authorisation, telecommuting is also based on a relationship of mutual trust between the employee and his or her manager.

INDICATORS	2017	2016	2015	
Number of employees who telecommute	1,061	596	507	

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4.5 SOCIETAL CHALLENGE: REINFORCE OUR REGIONAL INVOLVEMENT

4.5.1 Putting regional dialogue at the heart of our practices

Operating throughout France, the company has launched information and consultation initiatives for citizens, local authorities and all relevant stakeholders.

Regional consultation and dialogue, the keys to successful projects

For over fifteen years, SNCF Réseau has implemented a public participation policy based on three key pillars: consideration of regional needs, the socio-economic interest of its projects and preservation of the environment.

Building on the impetus generated by lawmakers, SNCF Réseau began implementing innovative and voluntary approaches in 1997. On 14 December 2016, it signed the Ministry of the Environment participation charter.

Certain projects can result in conflict: removal of a level crossing, modification of station infrastructures, creation of multimodal exchange hubs, etc. This is why SNCF Réseau increases the number of discussions - from project kick-off to site preparation - according to the procedures and the regional sensitivity.

The company is increasingly relying on more educational and interactive consultation tools that bring it closer to the public, such as citizen workshops, passenger and resident meetings and the development of digital participation tools.

Already recognised among its stakeholders, the company continues to remain open, transparent and willing to discuss to combine the expectations of customers and regions for a more expansive and sustainable network.

INDICATORS	2017	2016	2015
Number of consultations			
- of which number of voluntary consultations	32 8	35 17	26 14
Number of partnerships with national and local associations with respect to sustainable development	85	104	111

4.5.2 Actively contribute to regional economic and social development

Through its property and real estate activity

Disposals and participation in the national housing policy

SNCF Réseau carried out 296 disposals for a total of 240 hectares that will be used to develop around 3,492 housing units.

The main transaction in 2017 involved the first sale of land and a space to the Société du Grand Paris in Bécon-les-Bruyères.

In terms of outlook, the Gobelins sites and part of the Invalides train station were selected for an innovative urban call for projects called "Reinvent Paris 2", and 3 sites were chosen for the "Reinvent the Greater Paris region" project: Argenteuil, les Ardoines and Pleyel. The advent of the 2024 Olympic Games has speeded up the urban redevelopment in Northern Paris where SNCF Réseau has several sites (Hébert, Dubois, Gare des Mines) registered under the agreement signed with the City of Paris in 2016. At the same time, discussions on the construction of a future hospital in St Ouen are ongoing.

Finally, two new real estate agreements were signed in 2017 involving Greater Lyon and Reims.

INDICATORS	2017	2016	2015
Surface areas transferred during the year			
(hectares)	240	1,474	107
of which surface areas transferred for the			
construction of housing (hectares)	218	23	15
Number of housing units built	3,492	2,132	950
of which number of social housing units built	1,362	1,099	600

- Streamlining of tertiary sites

On 13 October, SNCF Réseau signed a new lease for a 29,000 $\rm m^2$ site in St Denis that will house the Réseau IIe-de-France teams and the SNCF Réseau IT department.

- Contribution to the growth of real estate transactions

On 7 September 2017, the SNCF Réseau Board of directors decided that SNCF Réseau would create a real estate holding company whose main purpose would be to invest in companies that would develop and promote the properties and equipment sold by the public rail group.

Network refurbishment support

SNCF Réseau is revamping its training facilities; the first step was completed in 2017 with the construction of new buildings in Nanterre. The Greater Paris maintenance and works teams which represent 40% of staff did not have their own premises. Training at this site may reach 58,000 intern days in 2021 and prepare employees for renewal work on the Greater Paris network for the next 10 years. Developments similar to these new buildings are to be scheduled for other major regional cities.

In July 2017, SNCF Réseau commissioned a new workshop covering nearly 5,000 m^2 for the assembly of switches and crossings and their delivery by trestle wagons. This operation launched in 2015 is part of the planned industrialisation of switches and crossings in order to carry out 550 renewals per year over the next 10 to 15 years, in accordance with the Major Network Modernisation Plan.

- Development of unused lines

SNCF Réseau owns approximately 8,000 km of linear infrastructures, where traffic is absent and which will not be reopened in the short or mid term. These assets are developed via tourist rail operations or greenways under temporary occupancy or management transfer agreements.

Several agreements were signed in 2017, mainly with the City of Paris or the RATP involving the Paris Little Belt Railway, or with regional authorities for the creation of greenways.

INDICATORS	2017	2016	2015
Share of kilometres for lines closed that were			
subject to right-of-way protection (%)	80	76	74

*2015 and 2016 figures updated following additional data

Through solidarity purchasing and SMEs

- Solidarity and responsible purchasing

SNCF Réseau drives local development through a purchasing policy that favours SMEs. In 2017, between 25% and 30% of the purchases of SNCF Réseau were carried out with local SMEs. A "SME desk" was set up on the website to enable SMEs to get to know each other and forge relations directly with SNCF Réseau contacts.

In addition, a significant portion of the company's purchasing involves solidarity purchases through various means: services or supplies purchased from the sheltered and adapted work sector (disability, adapted enterprise, ESATs¹³), and integration projects with occupational integration companies, intermediary associations and ETTIs¹⁴.

Finally, the inclusion of social clauses in work contracts is requested in order to develop equal opportunity through assisted employment in sensitive zones and the return to employment of the long-term unemployed.

INDICATORS	2017	2016	2015
Total SNCF Réseau solidarity purchases (direct and indirect) (€m)*	10.1	6.9	3.9
Equivalent number of jobs obtained by the protected and adapted sector**	80**	61	38
Number of integration projects	40	28	35
Number of assisted contracts generated by integration projects	146	118	288
Number of hours of social integration achieved through social clauses (h)*	227,76 6	148,65 0	51,316

*Of which Eole performance: €3 million

**2016 and 2015: updated figures

- SNCF Foundation

SNCF Réseau is a founding member of the SNCF Foundation¹⁵, which changed its status in 2016 to become that of the SNCF Group as a whole, and which is active in three areas aimed at promoting a more harmonious society, namely education, culture and solidarity. Its Chairman is Patrick Jeantet, Chairman of SNCF Réseau.

The SNCF Foundation notably offers skills sponsorship, which consists in employees sharing their know-how with an association during their working hours, for up to ten days per year.

INDICATORS	2017	2016	2015
SNCF Réseau payment to the SNCF			
Foundation (€k)	500	500	na*
Number of associations by the SNCF			
Foundation	1,119	984	960
Number of SNCF Réseau employees who participated in skills sponsorship			
	542	330	245

*SNCF Réseau became a founding member of the new SNCF Foundation in 2016

4.5.3 Prevent and reduce railway noise

- Noise pollution resulting from rail traffic

To reduce noise pollution, SNCF Réseau takes into account the noise factor from the outset of projects. The reduction of noise pollution requires initiatives, at times combined, covering rolling stock, infrastructure, track and operations.

A national policy governing the resorption of railway noise black spots was set up several years ago by the French State, in relation with SNCF Réseau and its partners. The process consists in identifying the most critical situations and implementing treatment operations to resorb noise. Some 58,000 buildings and 500,000 residents are potentially concerned. Significant investments have been made since 2008 (€140 million) to treat several thousand housing units.

Noise emissions depends on the noises made by tracks and rolling stock. After several years of research and testing, this

maintenance policy includes, for the first time this year, acoustic performance requirements so as to improve acoustic gains after rail reprofiling.

SNCF Réseau is also sharing best practices and the results of European research in cooperation with Bruit Parif for Greater Paris, Acoucité for Greater Lyon, and DB Netze.

Finally, SNCF Réseau was the official partner for the first time this year of the Assises nationales de la qualité de l'environnement sonore (National Conference on the Quality of the Sound Environment). The company is also very active in national and European standard-setting committees.

- Noise pollution resulting from rail projects

During rail work, SNCF Réseau strives to limit noise pollution related to the different work phases, and uses certified heavy equipment that complies with noise standards. Its actions, including the establishment of ballast pits, reduce tenfold the source of noise pollution from ballast operations. Residents are systematically informed about a project's nature, anticipated duration, the expected noise impact and the measures taken to limit it.

INDICATORS	2017	2016	2015
	2017	2010	2013
Investments devoted to the resorption railway noise black spots during development and			
modernisation projects (€m)	2.7	5.9	8.8
Number of railway noise black spot buildings			
treated *	734	736	2,405
Population benefiting from railway noise black			
spot treatment (nb of persons)*	2142	2,208	5,550
*Ear 2016, updated figure			

*For 2016: updated figure

4.6 EXTRA-FINANCIAL REPORTING METHODOLOGY

The social, societal and environmental reporting initiative of SNCF Réseau is based on the reporting obligation set out in Articles L. 225-102-1 and R. 225-104 to R. 225-105 of the French Commercial Code. It is inspired by international standards and norms, notably:

- The transparency principles of the Global Reporting Initiative (GRI 3), which SNCF Réseau has been using as a reporting framework since its 2009 sustainable development report;
- The ISO 26000 standard on the Social Responsibility of Organisations

Reporting governance, the process, the timetable and the methodological specificities of certain indicators are explained in a methodology note¹⁶ available online. It is based on the preparation of an extra-financial reporting protocol that has not been published to date, although the company has referenced it internally. Following the rail reform and the resulting changes in scope, the reference year of this reporting is 2015.

SNCF Réseau will publish a sustainable development report in mid-2018.

¹³ ESAT: centres and aid services for work

¹⁴ ETTI: temporary work integration enterprises

¹⁵ SNCF Foundation website: https://www.fondationsncf.org/fr/

¹⁶ The extra-financial methodology reporting is available online: http://www.sncf-reseau.fr/fr/rapports-et-indicateurs

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5 CHALLENGES AND OUTLOOK

SNCF Réseau is guided by a long-term vision and has drafted a new strategy for 2030. Safety, the company's intangible value, will be reinforced in the long term by the ongoing management programme PRISME. Efforts have continued to reduce major safety incidents, simplify structures and roll out digital technology. The digital transformation of the maintenance business line is based on the deployment of CMMS and new digitised surveillance and monitoring techniques.

In addition to the measures specific to the H00 programme for robustness, and the FIRST programme for passenger information that were designed in 2017 and will be implemented in 2018, production performance continues to be driven by decisive initiatives: overhaul of punctuality management, successful roll-out of an expert network (railway line managers and managers of regional operations) serving the general production system, development of "Performance observatory" use cases, etc.

Traffic management productivity and efficiency were boosted by the ongoing Network Operations Centralised Commands programme with major operations: Paris-Aulnay-Roissy-Mitry (phase 3 in 2018), Bourgogne Sud phase 2 (November 2018), and Rennes sud (March 2018). The Operational Traffic Management Modernisation programme will also contribute to the traffic management efficiency target as from 2019 on the Paris-Marseille line, its priority deployment.

The ongoing and heightened renewal efforts in accordance with the French State – SNCF Réseau performance contract will sustain the section with the most traffic on the primary network by strengthening industrial partnerships to further innovation, develop new methods and build an ecosystem in the interests of railway transport.

Finally, the National Conference of Territories and the Assises de la Mobilité conference should prepare the mobility law in the first half of 2018. Chaired by the former chairman of the AFITF, Philippe Duron, the new Infrastructure Guidance Board will carry on this work after the national mobility conference. It brings together MPs, experts and specialists for a more efficient sorting of major infrastructure projects according to the actual resources of the AFITF. At the same time, the Spinetta report which is currently being finalised puts forward an overall strategy to overhaul the rail transport model in a market that is now open to competition, while preserving the mandates of an efficient public service.

The year 2018 will be marked by a major transformation in SNCF Réseau with the presentation of the 2030 strategy and the ensuing reorganisation in order to meet these challenges.

03 -SNCF RÉSEAU GROUP CONSOLIDATED FINANCIAL STATEMENTS

IFRS – In € millions



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CONSOLIDATED STATEMENT OF FINANCIAL POSITION

CONSOLIDATED ASSETS

In € millions	Note	31/12/2017	31/12/2016
Goodwill		-	-
Intangible assets	4.1.1	320	245
Property, plant and equipment	4.1.2	64,641	61,183
Non-current financial assets	5.2.2	3,732	3,804
Investments in companies consolidated under the equity method		11	9
Deferred tax assets	8	3,511	3,779
Non-current assets		72,216	69,021
Inventories and work-in-progress	4.6.1	529	492
Operating receivables	4.6.2	2,388	2,727
Grants receivable	4.6.3	1,592	1,839
Current financial assets	5.2.2	1,467	263
Cash and cash equivalents	5.2.2	3,326	3,229
Current assets		9,301	8,551
Total assets		81,517	77,572

Notes 1 to 11 are an integral part of these consolidated financial statements.

The figures shown in the tables are expressed in millions of euros. Rounding off may, in certain cases, give rise to insignificant differences in aggregate amounts.

CONSOLIDATED EQUITY AND LIABILITIES

In € millions	Note	31/12/2017	31/12/2016
Share capital	5.1	9,765	9,765
Reserves and accumulated deficit		-21,717	-21,724
Total equity		-11,953	-11,959
Non-current employee benefits	6	865	847
Non-current provisions	4.8	271	429
Investment grants	4.2.1	28,216	26,806
Financial liabilities	5.2.2	51,246	48,237
Right of use granted to the concession holder	4.3	2,647	2,616
Non-current liabilities		83,245	78,936
Current employee benefits	6	58	60
Current provisions	4.7	39	9
Operating liabilities	4.6.4	4,327	4,347
Grants	4.2.2	1,892	2,186
Financial liabilities	5.2.2	3,909	3,993
Current liabilities		10,224	10,595
Total equity and liabilities		81,517	77,572

CONSOLIDATED INCOME STATEMENT

In € millions	Note	31/12/2017	31/12/2016
Revenue	7.1	6,496	6,441
Purchases and external charges	7.2	-2,088	-2,100
Employee benefit expense	7.3	-2,315	-2,256
Taxes and duties other than income tax	7.4	-211	-216
Other operating income and expenses		16	20
Gross profit		1,897	1,889
Depreciation and amortisation	4.1.4	-1,764	-1,511
Net movement in provisions	4.7	113	-90
Investment grants released to profit or loss	4.2.4	779	662
Net proceeds from asset disposals	4.4	74	66
Current operating profit		1,099	1,016
Operating profit/(loss)		1,099	1,016
Share of net profit/(loss) of companies consolidated under the equity method		1	1
Operating profit/(loss) after share of net profit/(loss) of companies consolidated under the equity method		1,100	1,016
Net borrowing and other costs	5.2.1	-1,163	-1,158
Net finance costs of employee benefits	5.2.1	-9	-15
Finance cost		-1,172	-1,173
Net profit/(loss) before tax from ordinary activities		-72	-157
Corporate income tax		-129	37
Net profit/(loss) from ordinary activities		-201	-120

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

In € millions	Note	31/12/2017	31/12/2016
Net profit/(loss) for the year		-201	-120
Other comprehensive income:			
Change in fair value of cash flow hedges	5.3	353	-207
Tax on change in fair value of cash flow hedges		-141	28
Share of recyclable other comprehensive income of companies consolidated under the equity method		-	-
Total recyclable other comprehensive income		213	-179
Actuarial gains and losses arising from employee defined benefit plans	6	-22	-4
Tax on actuarial gains and losses arising from defined benefit plans		8	6
Share of non-recyclable other comprehensive income of companies consolidated under the equity method		-	-
Total non-recyclable other comprehensive income		-15	2
Total comprehensive loss for the year		-3	-296

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

		Non- recyclable	Recyclable	Accumulated	Net profit/(loss)	
In € millions	Share capital	reserves	reserves	reserves	for the year	Total equity
Equity as at 01/01/2016	9,765	-15	-770	-10,693	-9,916	-11,630
Net profit/(loss) for the year	-	-	-	-	-120	-120
Other comprehensive income	-	2	-179	-	-	-176
Total comprehensive income	-	2	-179	-	-120	-296
Appropriation of earnings	-	-	-	-9,916	9,916	-
Change in scope	-	-	-	-	-0	-
Other changes	-	0	-	-33	-	-33
Equity as at 31/12/2016	9,765	-13	-948	-20,643	-120	-11,959
Net profit/(loss) for the year	-	-	-	-	-201	-201
Other comprehensive income	-	-15	213	-	-	198
Other comprehensive income	-	-15	213	-	-	-3
Appropriation of earnings	-	-	-	-120	120	0
Changes in shareholdings in subsidiaries without loss of control	-	-	-	1	-	1
Other changes	-	-	-	9	-	9
Equity as at 31/12/2017	9,765	-28	-736	-20,753	-201	-11,953

CONSOLIDATED CASH FLOW STATEMENT

In € millions	Note	31/12/2017	31/12/2016
Net profit/(loss) for the year attributable to equity holders of the		-201	-120
parent			
Net profit/(loss) for the year		-201	-120
Eliminations:			
share of profit of associates		-1	-1
deferred tax expense(income)		130	-36
depreciation, amortisation, and provisions(*)		881	937
revaluation gains/losses (fair value)		24	21
net proceeds from disposals and gains and losses on dilution	4.4	-74	-66
Cash from operations after net borrowing costs and taxes		759	735
Eliminations:			
net borrowing costs	5.2.3	1,136	1,135
Cash from operations before net borrowing costs and taxes		1,894	1,869
Impact of change in working capital requirement	4.6	-80	372
Taxes paid (collected)		1	15
Cash flow from operating activities		1,815	2,256
Acquisitions of subsidiaries net of cash acquired		0	-
Purchases of intangible assets and property, plant and equipment	4.1.3	-5,180	-5,231
Disposals of intangible assets and property, plant and equipment		94	95
Changes in loans and advances	5.2.2	-249	-
Investment grants received	4.2.3	2,350	1,617
Cash flow used in investing activities		-2,985	-3,518
Issue of debt instruments	5.2.3	4,878	4,741
Repayments of borrowings	5.2.3	-1,386	-1,758
Payments relating to PPP payables	5.2.3	-63	-
Receipts relating to PPP receivables	5.2.3	63	-
Net borrowing costs paid	5.2.3	-1,165	-1,148
Increase/(decrease) in cash borrowings	5.2.3	-1,026	157
Cash flow from financing activities		1,301	1,992
Increase (decrease) in cash and cash equivalents		131	725
Opening cash and cash equivalents		3,172	2,447
Closing cash and cash equivalents	5.2.2	3,303	3,172

Notes 1 to 11 are an integral part of these consolidated financial statements.

(*) This corresponds to charges, net of reversals, to depreciation, amortisation and provisions less investment grants released to profit or loss.

1 ACCOUNTING STANDARDS BASE

The figures shown in the tables are expressed in millions of euros. Rounding off may, in certain cases, give rise to insignificant differences in aggregate amounts.

The terms "SNCF Réseau," and "the Group" designate the parent company EPIC SNCF Réseau and its consolidated subsidiaries.

The term "EPIC SNCF Réseau" designates the parent company only.

1.1 APPLICATION OF IFRS

Pursuant to European Regulation 1606/2002 of 19 July 2002, the consolidated financial statements of SNCF Réseau Group for the year ended 31 December 2017 have been prepared in accordance with the international accounting standards issued by the IASB (International Accounting Standards Board) and adopted by the European Union at this date. The IFRS framework, as adopted in the European Union, may be consulted on the European Commission website:

(http://ec.europa.eu/internal_market/accounting/ias/index_fr.ht m).

The basis of preparation for the 2017 consolidated financial statements detailed in the following notes is the result of:

- standards and interpretations of mandatory adoption,
- elected accounting options and exemptions applied in the preparation of the 2017 financial statements. These options and exemptions are described in the notes to the financial statements concerned. Among the most significant are the recognition of investment grants under liabilities, the balance sheet presentation of investment property at historical cost and the recognition of certain financial liabilities at fair value.

Standards and interpretations not adopted in advance for the preparation of the 2017 consolidated financial statements

The Group did not opt for the early adoption of those applicable standards and interpretations for the preparation of the 2017 consolidated financial statements.

In particular, the Group did not adopt the following standards for its 2017 consolidated financial statements:

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Standard or interpretation	Summarised description	Expected impacts	Mandatory date of adoption (period beginning as of)	European Union approval status
IFRS 15 "Revenue from contracts with customers"	This new standard proposes a single revenue recognition model applicable to all types of customer contracts, regardless of the entity's business segment. This model, which follows five key steps, is based on the transfer of control which may be continuous or at a given time. The notion of the transfer of risks and rewards is no longer predominant. Revenue is recognised on the supply of promised goods or services for the amount of the consideration expected in exchange.	The analysis of current revenue recognition methods revealed that no major impact is expected on SNCF Réseau's earnings.	01/01/2018	Adopted on 29/10/2016
IFRS 9 "Financial instruments"	It replaces IAS 39 on the recognition of financial instruments. It has 3 modules: classification and measurement of financial assets and financial liabilities; impairment of financial assets; derivatives and hedge accounting.	The options proposed in module 3 of the standard that were adopted concern the cost of hedging: exclusion from the hedging relationship of foreign currency basis spread and premiums/discounts on forward currency purchases; changes in the value of these items deferred to OCI will be recycled to profit or loss according to the time related method. These options will significantly reduce the ineffectiveness of the current hedging relationships recognised in profit or loss. The first option will be applied retrospectively, while the second option will be adopted prospectively. The impacts on opening equity are still being determined but there will be no impact on total equity as this involves reclassifications within various reserves. The standard's other provisions will have no material impact on SNCF Réseau Group profit or loss or equity.	01/01/2018	29/11/2016
IFRS 16 "Leases"	This new standard covers the recognition of leases and will replace the current IAS 17. It establishes principles for the recognition by lessees of all leases with a term of 12 months or more as finance leases by offsetting a non-current asset (right-of-use asset) against a lease liability. Accounting by lessors remains similar to that set forth in IAS 17.	The impacts on the balance sheet total are still being assessed. Planned simplified retrospective application of the transition method.	01/01/2019	Adoption in the fourth quarter of 2017

1.2 ACCOUNTING JUDGEMENTS AND ESTIMATES

In order to prepare the Group accounts, management must make estimates, as numerous items included in the consolidated financial statements cannot be valued precisely. The accounting estimates used for the 31 December 2017 financial statements were prepared using the best information available at the year-end. Management is required to revise its estimates in the event of a change in circumstances on which they are based or as a result of new information or further experience. As such, the estimates adopted on 31 December 2017 may be substantially modified and subsequent actual results may differ materially from these estimates based on different assumptions or conditions.

These estimates and assumptions primarily concern:

Impairment of non-financial assets (see Note 4.5)

At each balance sheet date, the Group assesses whether there is any indication that a non-financial asset may have lost value and, where necessary, performs an impairment test.

This tests seeks, in part, to determine a value in use or a market value less costs to sell. Value in use calculations are based on management estimates of expected future cash flows from the asset or cash-generating unit (CGU), the appropriate discount rate to be used to calculate the present value of these future cash flows and the growth rate adopted. Market value calculations are based on an assessment by management of the transaction price that could be obtained for the sale of the assets tested, taking into account the current condition of such assets.

Measurement of derivative financial instruments (see Note 5)

The fair value of all financial assets and liabilities is determined at the balance sheet date either for recognition purposes or for disclosure purposes in the notes to the financial statements.

Recognition of deferred tax assets (see Note 8)

A deferred tax asset is recognised when it is probable that the Group will generate future taxable profits against which unused tax savings may be offset. The Group's ability to recover these tax assets is analysed based on its business plan, contingencies relating to the economy and the uncertainties surrounding markets in which the Group is active.

Employee benefit-related items (see Note 7)

Considering that these benefits are settled several years after the personnel has rendered the corresponding services, the obligations under defined benefit plans and other long-term liabilities are recognised using actuarial valuations based on financial and demographic assumptions including discount, inflation, and salary increase rates and mortality tables. Due to the long-term nature of these plans, changes in these assumptions can generate actuarial gains and losses and may lead to significant changes in the recorded commitments.

Provisions for environmental risks (see Note 4.6)

The Group records a provision for environmental risks when there is a legal or implicit obligation towards a third party that can be reliably measured and which would result in an outflow of resources.

Amounts recorded for site decontamination are based on the best possible estimate resulting from year-end assessments and take into account these valuations for known risks currently being assessed.

Amounts recorded for the removal of asbestos from rolling stock correspond to the estimated costs at the end of the equipment's life. These costs are determined based on new contracts signed, orders placed or the target prices of recent calls for tender.

1.3 BASIS OF CONSOLIDATION

Entities under control, joint ventures and associates

Companies over which the Group exercises control, directly or indirectly, are fully consolidated. Under IFRS 10, control is defined and determined based on three criteria: power, exposure to variable returns and the relationship between power and these returns.

Joint arrangements qualified as "joint operations" within the meaning of IFRS 11 are recorded for their share of assets and liabilities and revenues and expenses after elimination of intragroup transactions.

Partnerships qualified as "joint ventures" within the meaning of IFRS 11 are equity-accounted.

The list of Group entities, joint ventures, joint operations, and associates is presented below.

	%	%			Total	
Entity name	interest	control	Revenue	Profit/loss	assets	Consolidation method
SNCF Réseau	100	100	6,395	-204	81,439	Parent company
SFERIS	100	100	91	4	54	Full consolidation
Altamétris	100	100	2	0	3	Full consolidation
CDG Express Etudes	33	33	0	0	15	Method applicable to joint operations
Eurailscout BV	50	50	8	0	5	Equity accounting

The wholly owned entity Altametris entered in the scope of Sncf Reseau in the first half of 2017. It is responsible for developing and marketing the acquisition, processing and optimisation of data using automated mobile devices, primarily drones and satellites.

The LFP interest that SNCF Réseau holds jointly with ADIF was not consolidated insofar as SNCF Réseau and ADIF only have a temporary role as joint managers with no possible impact on equity.

In November 2017, SNCF Réseau was authorised to create a real estate holding company and two joint ventures in partnership with SNCF Mobilités, one for development operations and the other for the promotion of rail property assets.

The interests in joint ventures and non-consolidated associates as well as the interests in non-consolidated structured entities were immaterial.

1.4 SEGMENT REPORTING

SNCF Réseau's activity consists in managing the entire French national rail network it owns. The Group does not operate in any sectors other than the rail sector.

Segment reporting is therefore not relevant.

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2 MAJOR EVENTS

2.1 FRENCH STATE / SNCF RÉSEAU AGREEMENT

2.1.1 Multi-year performance contract

On 20 April 2017, SNCF Réseau signed the 2017-2026 performance contract with the French State.

Under this contract, the rail network management policy and the rail infrastructure development strategy defined by the French State will be implemented.

It provides for primary network investments of €34 billion over 10 years:

- €27.9 billion for renewal,
- €4.5 billion for compliance upgrades,
- €1.8 billion in industrial investments, with nearly €300 million per year from 2017 to 2019 to ensure future productivity.

The plan also earmarks €12 billion for regional lines and rail hubs as part of State-Region Contracts.

The contract also provides for the payment of allocations by SNCF to SNCF Réseau, starting at €170 million in 2017 and ending at €603 million in 2026.

The allocation of €170 million to the French State support fund was confirmed by SNCF at its Supervisory Board meeting of 27 April 2017 and paid in August 2017.

In the multi-year contract, SNCF Réseau has undertaken to roll out a performance plan to achieve productivity of €453 million by 2021 and €1.2 billion in 2026. Performance will be driven by industrial efficiency and the decline in maintenance volume (following the network renewal in 2021).

2.1.2 Golden rule

The purpose of this rule is to control SNCF Réseau debt by setting a ratio threshold of 18 (Net Debt/Gross Profit), beyond which SNCF Réseau can no longer contribute to investment financing, which must then be covered by the requesting party (French State, regional authorities, etc.).

Based on the 2017 annual accounts, the SNCF Réseau Board of directors' meeting of 22 February 2018 noted that the ratio was 23.85, thus exceeding the threshold of 18.

Decree 2017-443 of 30 March 2017 was published in the *Journal Officiel* of 31 March 2017.

2.2 RAIL SYSTEM FINANCING

2.2.1 New Green Bond issue

After its successful initial Green Bond issue in October 2016, SNCF Réseau continued its programme with two new benchmark public issues:

- $\bige 1$ billion, maturing in 17 years, at a rate of 1.92% in March 2017,
- €750 million, maturing in 30.4 years, at a rate of 2.31% in July.

2.2.2 Switch to bilateral derivative hedging contracts

Pursuant to the authorisation obtained at the 30 November 2016 Board of directors' meeting, hedging contracts were adjusted to set up bilateral margin calls (no longer unilateral).

This adjustment enables SNCF Réseau to conclude hedging instruments (interest rate, currency) under more favourable financial terms and conditions. An initial cash collateral deposit of €916 million was granted to financial institutions in respect of the hedging financial instruments subscribed by SNCF Réseau. According to market changes, this cash position may increase or decrease.

2.3 IMPAIRMENT TEST

The changes in French social security contributions and the tax credit (CICE), resulting from the French Finance Acts and the French Social Security Financing Law for 2018, represented indications of impairment for Infrastructure CGU assets. A test was therefore carried out on 31/12/2017. The detailed components of this test are shown in Note 4.5 "Impairment tests of non-current assets." As in 2016, the outcome of this test did not modify the impairment loss of ξ 9.6 billion recognised as at 31 December 2015.

3 SUBSEQUENT EVENTS

ARAFER opinion 2018-004 of 22 January 2018

On 22 January 2018, ARAFER adopted an opinion on fees relating to the regulated services provided by SNCF Réseau in passenger stations for the 2018 service timetable. The issued opinion was favourable and had no impact on the Group's financial statements.

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4 OPERATING ASSETS AND LIABILITIES

4.1 INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

4.1.1 Intangible assets

Intangible assets include purchased or internally-developed software and industrial processes.

Software purchased for valuable consideration is recognised at acquisition cost, which is the purchase price plus any incidental expenses necessary to put them into service.

Internally-developed software and industrial processes are recognised in assets at production cost where it meets the corresponding IAS 38 criteria.

Subsequent expenditure is capitalised if it increases the future economic benefits of the specific asset to which it relates, and if this cost can be reliably allocated to the asset. Costs associated with research activities prior to the detailed design stage and costs associated with maintaining software in operation are expensed in the period incurred.

Net intangible assets as at 31 December 2017 break down as follows:

In € millions	Gross	31/12/2017 Amortisation and impairment	Net	Gross	31/12/2016 Amortisation and impairment	Net
Concessions, patents, software	437	-345	92	392	-308	84
Other intangible assets	214	-128	86	150	-93	57
Intangible assets in the course of development	142	0	142	103	0	103
TOTAL	793	-473	320	646	-401	245

Movements in intangible assets break down as follows:

In € millions	Concessions, patents, software	Other intangible assets	Intangible assets in the course of development	Total
Net carrying amount as at 01/01/2016	84	80	82	246
Acquisitions	0	-	61	61
Disposals	-	-	-	-
Amortisation and provisions	-31	-22	-	-53
Impairment losses	-	-	-	-
Change in scope	-	-	-	-
Unrealised foreign exchange gains and losses	-	-	-	-
Commissioning and other changes	31	-1	-40	-10
Net carrying amount as at 31/12/2016	84	57	103	245
Acquisitions	-0	45	101	145
Disposals	-0	-	-	-0
Amortisation and provisions	-39	-34	-	-73
Impairment losses	-	-	-	-
Change in scope	0	-	-	0
Unrealised foreign exchange gains and losses	-	-	-	-
Commissioning and other changes	47	18	-62	3
Net carrying amount as at 31/12/2017	92	86	142	320

Acquisitions in 2017 primarily included internally generated software commissioned or in the course of development.

Intangible assets totalling €145 million were commissioned in 2017, compared with €46 million in 2016.

4.1.2 Property, plant and equipment

Property, plant and equipment primarily consist of French national rail network infrastructures. They are valued at acquisition or production cost.

Rail infrastructures

For projects carried out directly, production cost includes the cost of studies, construction work, purchase cost and compensation paid for land acquisitions and direct operating expenses.

The production cost of projects is capitalised in assets from the "pre-project" phase, with preliminary studies expensed in the period incurred.

The cost capitalisation period begins on the date on which management has made the decision, based on technical and financial plans, to produce the asset that is intended to generate future economic benefits. The cost capitalisation period ends when the projected level of use has been reached, i.e. at the end of the "production phase." The recognition point for the accounting of commissioned railway assets is the date of the report on the delivery of the structures to the maintainer; otherwise, the commercial commissioning date can be used. The production cost of work carried out under Public-Private-Partnerships (PPP) or concession arrangements is recognised in line with the physical progress of work based on the percentage completion communicated by the partners or concession holder. It consists of the sum of fees invoiced by the partners or concession holder plus the present value of future fees payable, multiplied by the percentage completion.

SNCF Réseau recognises a provision for the risk of noncompletion of current projects. This provision is calculated for projects that have not been recorded. Furthermore, if an exceptional event calls project completion into question, the item of property, plant and equipment in the course of construction was written down in full. Impairment is calculated net of earned grants related to the corresponding projects. Furthermore, when the cancellation of a current project is confirmed, the corresponding costs are transferred to expenses. Where necessary, the corresponding grants are transferred to income

Investment property

Investment property consists of property assets held by the Group in order to collect rents or for capital appreciation.

Investment property is measured at acquisition cost and depreciated on a straight-line basis over the respective useful lives.

Net property, plant and equipment as at 31 December 2017 break down as follows:

		31/12/2017			31/12/2016	
In € millions	Gross	Depreciation and impairment	Net	Gross	Depreciation and impairment	Net
Investment property	332	-24	309	356	-23	333
Land and buildings	11,259	-3,355	7,904	9,417	-3,208	6,210
Tracks, earthworks, engineering works and level crossings	48,388	-18,840	29,548	42,645	-17,933	24,712
Industrial and technical plant (ITP) and other assets	7,791	-946	6,845	1,081	-853	228
Electrification, telecommunications, signalling	15,624	-8,144	7,480	13,522	-7,645	5,877
Transportation equipment	1,005	-840	165	999	-828	171
Property, plant and equipment in the course of construction	12,428	-37	12,391	23,684	-32	23,651
TOTAL	96,828	-32,187	64,641	91,705	-30,523	61,183

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Movements in net property, plant and equipment break down as follows:

In € millions	Investment property	Land and buildings	Tracks, earthworks , engineerin g works and level crossings	Industrial and technical plant (ITP) and other assets	Electrificatio n, telecommuni cations, signalling	Transpo rtation equipm ent	Property, plant and equipme nt in the course of construct ion	Total
Net carrying amount as at 01/01/2016	339	6,256	22,986	190	5,494	199	22,013	57,476
Acquisitions	-	0	-	3	-	0	5,023	5,026
Disposals	-5	-10	-	-0	-	0	-	-16
Depreciation and provisions	-	-131	-821	-47	-443	-18	-10	-1,470
Impairment losses	-	-	-	0	-0	-0	-	-0
Change in scope	-	64	1	5	0	-	0	69
Unrealised foreign exchange gains and losses	-	-	-	-	-	-	-	-
Commissioning and other changes	-1	31	2,547	78	826	-9	-3,374	98
Net carrying amount as at 31/12/2016	333	6,210	24,712	228	5,877	171	23,651	61,182
Acquisitions	-	0	-	2	-	-	5,262	5,264
Disposals	-20	-0	-	-1	-	-0	-	-21
Depreciation and provisions	-	-167	-911	-120	-500	-16	-5	-1,720
Impairment losses	-	-	-	-	-	-	-	-
Change in scope	-	-	-	1	-	-	0	1
Unrealised foreign exchange gains and losses	-	-	-	-	-	-	-	-
Commissioning and other changes	-4	1,862	5,747	6,735	2,103	8	-16,518	-67
Net carrying amount as at 31/12/2017	309	7,904	29,548	6,845	7,480	164	12,390	64,640

The breakdown of depreciation charges is shown in Note 4.1.4 below.

Property, plant and equipment totalling €16,452 million were commissioned in 2017 and mainly include:

- €11,072 million for the commissioning of PPPs and concessions (SEA for €6,541 million, BPL for €2,892 million and CNM for €1,639 million);
- €4,014 for railway projects;
- €364 million for the GSM-R project;
- €845 million for the capitalisation of interest, of which SEA for €416 million and BPL for €107 million;
- €155 million related to various projects, including rail equipment, machinery and other operating projects.

4.1.3 Investments

Capital expenditure flows break down as follows:

In € millions	31/12/201 7	31/12/2016
Property, plant and equipment	-5,337	-5,059
Intangible assets	-145	-61
Total acquisitions	-5,482	-5,120
Changes in amounts payable on intangible assets and PP&E	302	-111
Intangible assets and PP&E capital expenditure flows	-5,180	-5,231

Investments in intangible assets in 2017 included IT project capitalised production for ${\bf \xi}100$ million.

Investments in property, plant and equipment in 2017 totalled $\notin 5,337\,$ million, including capitalised production for $\notin 4,344\,$ million.

Investments in property, plant and equipment mainly include:

- €4,912 million in infrastructure investments which break down as follows:
 - o €4,125 million in direct production;
 - o €458 million in production relating to PPPs and concessions (GSMR €7 million, BPL €318 million, CNM €133 million);
 - o €68 million in payments on account;
 - o €130 million in direct acquisitions;
 - o €119 million in major repairs;
- €278 million in capitalised interest;
- €147 million in other investments (rail equipment, machinery and other operating projects).

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4.1.4 Depreciation and amortisation

Intangible assets

Intangible assets, mainly comprising software and industrial processes, are amortised on a straight-line basis over their estimated useful life, i.e. generally less than five years.

Property, plant and equipment

SNCF Réseau has established a list of component types for its infrastructure assets. This classification includes 11 families comprising approximately 100 components. In addition, tracks are classified based on International Union of Railways (UIC) line traffic indicators.

SNCF Réseau has defined useful lives for each component in its list. Depreciation is calculated on a straight-line basis over the following periods defined in accordance with the recommendations of technical experts in the relevant field:

Land	Not depreciated
Improvements to land	20 to 30 years
Buildings	15 to 50 years
Improvements to buildings	10 years
Earthworks	10 years
Tracks	20 to 100 years
Electricity supply equipment	10 to 75 years
Signalling	15 to 50 years
Telecommunications	5 to 30 years
Level crossings	15 years
Engineering works	30 to 70 years
Trains	30 years
Improvements to buildings owned by third parties	-
Machinery and equipment	5 to 20 years
Furniture and office equipment	5 to 7 years
IT and telecommunications	3 to 5 years
Cars	5 years

Depreciation and amortisation break down as follows:

In € millions	31/12/2017	31/12/2016	Change
Amortisation of intangible assets	-49	-53	4
Depreciation of property, plant and equipment	-1,716	-1,458	-257
Depreciation and amortisation	-1,764	-1,511	-253

The increase in net depreciation and amortisation was mainly attributable to the commissioning of PPPs and concessions (SEA for \notin 58 million, BPL for \notin 48 million and CNM for \notin 3 million).

4.2 GRANTS FOR INVESTMENT PROJECTS

SNCF Réseau receives grants under financing agreements for investment projects concluded with third parties (French State, Local authorities, Regions, etc.).

They follow the same accounting treatment as the corresponding expenditure and are recognised as follows:

- in the income statement in a specific account "Operating grants" and deducted from the aggregate heading "Purchases and external charges" when they relate to operating expenses (general studies, preliminary studies),

- in balance sheet liabilities under non-current liabilities when they relate to capitalised expenditure. These grants are then released to profit or loss to match the depreciation recognised on the commissioned property, plant and equipment. For nondepreciable land, SNCF Réseau applies the average depreciation period of the assets associated with the land. The payment provisions for these grants differ according to the investment project and the payer's identity. They are paid according to a schedule included in the financing agreement or according to the actual progress of work.

At each balance sheet date and for each project, grant claims are reconciled with expenditure recognised in the accounts. Adjustments are then made and recognised either in assets in "Grants yet to be claimed," or on the "Grants" line of current liabilities for "Grants claimed in advance." The purpose of these adjustments is to determine the "earned grant" amount. "Earned grants" relative to PPP or concession arrangements are recognised according to the completion percentage of work, in parallel to the production in progress.

4.2.1 Summary of non-current grants

In € millions	31/12/2017	31/12/2016
Development grants for assets in the course of construction	3,722	9,690
Development grants for commissioned assets*	21,035	13,690
Renewal grants for commissioned assets*	3,289	3,301
2016 renewal grant*	-	126
2017 renewal grant*	170	-
Total	28,216	26,807

(*) Net of reversals

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Grants as at 31 December 2017 totalled €3,722 million. The decline was primarily due to the commissioning of concessions for the South Europe Atlantic (SEA) line in the amount of €2,839 million, the Brittany-Loire (BPL) line in the amount of €2,043 million and the Nîmes-Montpellier bypass in the amount of €1,535 million

Movements in the period break down as follows:

In € millions	Gross amount as at 31/12/2016	Increase	Commissioning	Reclassification	as at	s amount 2/2017
Grants for assets in the course of construction	9690	2,049	-7,99	2	-25	3,722

Development grants for commissioned assets

Grants for commissioned assets by type of asset break down as follows:

In € millions	Intangible assets	Land and buildings	Tracks, earthworks, engineering works and level crossings	ITP, electrification, telecom	Total
Net carrying amount as at 31/12/2016	17	1,835	8,840	2,997	13,690
Grants allocated to commissioned assets during the year	-	1,001	2,856	4,135	7,992
Change in scope	-	-	-	-	-
Disposal/Scrapping	-	-	6	-	6
Share of grant released to profit or loss	-9	-87	-251	-306	-653
Net carrying amount as at 31/12/2017	8	2,749	11,451	6,826	21,035

Renewal grants

All the renewal grants received from the French State until 2008 inclusive were commissioned. They continue to be released to profit or loss according to the schedule presented in the table below:

In € millions

Year of commissioning	Commissioning date	Period of release	Amount commissioned	Accumulated release	Net amount as at 31/12/2017
2004	01/07/2004	38	675	-239	436
2005	25/03/2005	42	574	-173	401
2006	09/05/2006	42	878	-243	635
2007	21/03/2007	35	734	-225	509
2008	17/04/2008	33	69	-30	39
2009	17/01/2009	42	844	-218	626
2010	22/01/2010	38	436	-138	298
2011	01/01/2011	51	20	-15	5
2012	01/01/2012	28	255	-94	161
2013	01/01/2013	41	75	-19	56
2016	01/01/2017	38	126	-3	123
Total		428	4,686	-1,397	3,289

The 2016 renewal investment grant of €126 million was paid in 2017 by a support fund, set up for this purpose. The 2017 renewal grant of €170 million was paid on 11 August 2017. It was commissioned on 1 January 2018.

4.2.2 Summary of current grants

 $\ensuremath{\mathsf{Grants}}$ presented in current liabilities correspond to grants claimed in advance.

In € millions	31/12/2017	31/12/201
Operating grants claimed in advance	151	201
Investment grants claimed in advance	1,741	1,985
Total	1,892	2,186

4.2.3 Investment grants received

Investment grants had the following impacts on cash flows:

In € millions	31/12/2017	31/12/2016
Fixed installations	2,219	1,400
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Change in receivables on grants	131	217
Investment grants received	2,350	1,617

4.2.4 Investment grants released to profit or loss

In € millions	31/12/2017	31/12/2016	Change
Development investment grants released to profit or loss	736	662	75
Grants for renewals and upgrade and compliance work released to profit or loss	42	0	42
Investment grants released to profit or loss	779	662	117

Investment grants released to profit or loss correspond to development grants for commissioned assets in the amount of €642 million and renewal grants for commissioned assets in the amount of €137 million.

The increase in investment grants released to profit or loss was mainly attributable to the commissioning of PPPs and concessions (SEA for \leq 26 million, BPL for \leq 36 million and CNM for \leq 3 million).

4.5 IMPAIRMENT TESTS OF NON-CURRENT ASSETS

The Group assesses whether there is an indication that an asset has been significantly impaired at each balance sheet date. Where there is such an indication, an impairment test is performed.

To carry out this testing, assets are grouped into Cash-Generating Units (CGU). A CGU is defined as the smallest group of identifiable assets whose use generates cash flow that are largely independent. SNCF Réseau has identified two CGUs: the "Infrastructure" CGU and the "Property" CGU.

IMPAIRMENT OF INFRASTRUCTURE CGU ASSETS

Scope of Infrastructure CGU assets

The Infrastructure CGU comprises all the assets pertaining to rail infrastructure management. These assets belong to the major "families" of the accounting classification for the following items of property, plant and equipment: Land and building development, Electricity supply equipment, Signalling facilities, Telecommunication facilities, Engineering works, Tracks, Level crossings, Earthworks, Rolling stock and Machinery. It also includes a portion of the Land and Buildings families.

Indications of loss in value/reversal

SNCF Réseau has adopted as an indication of loss in value/reversal a major permanent or long-term change in the following indicators:

- change in the business model or performance contract with the French State,

- definition of a new trajectory for maintenance and renewal expenditure,

- major change in the network pricing system,

- major change in the company's financing model or significant projects,

- labour reform within the company,

4.3 RIGHT OF USE GRANTED TO THE CONCESSION HOLDER

As part of the SEA concession arrangement, a liability known as the "right of use granted to the concession holder" was recognised for $\notin 2,647$ million as at 31 December 2017 compared with $\notin 2,616$ million as at 31 December 2016. It represents the share of the investment financed by the concession holder. This amount depends on the completion percentage of work which was 100% as at 31 December 2017.

4.4 NET PROCEEDS FROM ASSET DISPOSALS

Real estate and asset disposals not directly related to the activity are included in separate transactions below gross profit.

The net proceeds from disposal correspond to the difference between the sale price and the net carrying amount of the asset as well as any costs of releasing the lands sold.

As at 31 December 2017, net proceeds from asset disposals totalled €74 million (compared to €66 million as at 31 December 2016) and mainly comprised the sale of various complexes and properties (lands and buildings).

- obsolescence or physical deterioration of assets that was not foreseen in the depreciation schedule,

- material change in the extent or manner in which the asset is used,

- change in market interest rates.

Impairment

The impairment test involves comparing the reference net carrying amount of assets within the CGU scope with their recoverable amount. If the net carrying amount exceeds the value in use, an impairment loss is recognised for the difference. This impairment is allocated to each of the assets comprising the CGU, in proportion to their NCA. Once calculated and allocated, the impairment modifies the future depreciation schedule for the assets. If the test leads to a NCA for the CGU that is lower than the recoverable amount and impairment has previously been recognised, this impairment is reversed to the extent of the recoverable amount.

The reference net carrying amount corresponds to the net carrying amount of the assets in service, less the corresponding investment grants, plus the renewal asset outstanding, less the corresponding ongoing grants, and plus WCR.

The recoverable amount of the assets of the Infrastructure CGU consists of their value in use (there is no net selling price for these assets), i.e. the present value of estimated future cash flows expected from the continuous use of these assets and their exit at the end of their useful life.

The selected discount rate is determined based on the structure using the cost of resources and the risks faced by other regulated infrastructure managers comparable to SNCF Réseau.

MEASUREMENT OF INVESTMENT PROPERTY (PROPERTY CGU)

The assets of this CGU include both land and buildings. The land (including freight yards) is owned by SNCF Réseau but is not used in rail activities. This land includes bare and build-on land.

Indication of a potential loss in value of a CGU is assessed based on forecast realisation values for the assets in question, taken from the business plan.

The recoverable amount of the assets of the "Property" CGU is equal to the greater of fair value less costs to sell and value in use. Fair value less costs to sell is estimated based on:

- the geographic location of the land;

- a market value per m^2 , that takes into account the probable use of the land after disposal.

At each balance sheet date, SNCF Réseau assesses whether there is any indication that assets have lost/regained value. When it is the case, an impairment test is performed and a provision recognised if relevant. If the test leads to a net carrying amount for the CGU that is lower than the recoverable amount and impairment has previously been recognised, this impairment is reversed to the extent of the recoverable amount.

Once calculated and allocated, the impairment modifies the future depreciation schedule for the assets.

Impairment tests of Infrastructure CGU assets

The year-end impairment test on the Infrastructure CGU assets, carried out as at 31 December 2015, had led to an impairment loss of \notin 9.6 billion. At this year-end, the discussions with the French State prior to the signing of the multi-year performance contract stipulated by the law of 4 August 2014 had enabled management to build a financial trajectory for SNCF Réseau, taking into account the key changes and assumptions discussed and decided with the French State. On 9 March 2015, this financial trajectory was approved by the SNCF Réseau Board of directors, which considered that it represented the best business forecast for the next 15 years.

As part of the 31 December 2016 closing, the finalisation of the performance contract with the French State and its validation by the SNCF Réseau Board of directors on 20 December 2016 had represented an indication of a change in value. A new test was therefore carried out. The final version of the performance contract had led to the inclusion of additional productivity assumptions for expenses, the downward revision of platform fee assumptions, and the upward revision of compliance, renewal and industrial investment assumptions. The new test confirmed the network's economic value and served to move the test preparation method towards a more standard methodology, in line with the new context of the performance contract.

As part of the 31 December 2017 closing, certain measures implemented under the French Finance Acts and the French Social Security Financing Law for 2018, mainly involving changes in social security contributions, automatically altered SNCF Réseau's business model and therefore represent an indication of impairment for Infrastructure CGU assets. A new test was therefore carried out using the same methodology as the test performed on 31 December 2016.

Tested assets

The reference net carrying amount of Infrastructure CGU assets was \notin 32.8 billion as at 31 December 2017, compared with \notin 30.1 billion as at 31 December 2016, after impairment. These assets cover service lines and ongoing renewal work.

Other assets under construction (€0.9 billion as at 31 December 2017, compared to €1.4 billion as at 31 December 2016) involve capacity investments under development, whose value is analysed separately as part of a specific review.

Methods implemented to determine the recoverable amount and key assumptions

The discounted forecast cash flows are calculated over the tenyear business trajectory from the 2017-2026 performance contract with the French State, extended until 2030, which represents a normative year, as the network will therefore be considered as stabilised at that date with a sufficient level of performance. With respect to the SEA concession, the cash flow forecasts took into account the line's renewed operation following the concession grantor's operating phase, that is to say by 2061.

The terminal value is calculated using the indefinite projection at a rate of 1.7% of cash flows generated by 2030.

The projected cash flows are post-tax, the tax rate used being a theoretical tax at rates known on the different dates and applied to forecast current operating profit or loss.

Future cash flows were updated at a rate of 5.3% compared to 5.2% during the test carried out on 31 December 2016.

The impairment test key assumptions cover the level of infrastructure fees, public backing and current network maintenance.

Traffic forecasts under the 10-year plan were prepared for the Public Rail Group. They are consistent with the SNCF Mobilités forecasts.

The public backing contributing to the support of this renewal trajectory was approved based on commitments confirmed by the French State.

The allocations paid by SNCF to SNCF Réseau pursuant to the rail reform law were also taken into account. They were qualified as investment grants used to finance network renewal.

Rail network maintenance in fact comprises two major categories of activity

- Renewal: facilities replacement or significant upgrade.

- Facilities maintenance: preventive and corrective maintenance and tail.

The SNCF Réseau financial trajectory calls for a much more substantial renewal effort for the existing network than in the previous decade. It also includes the first major renewals of the high-speed lines currently in service. Priority is given to the llede-France network and the major lines with the most traffic. The effort is two-phased: a gradual step-up in the process until 2020 so as to progressively mobilise human and material resources and subsequently a stabilisation from 2020 to 2027, followed by a gradual decrease until the normative year 2030 to reach a replacement level that is aligned with the network.

The combined effect of a maintenance effort and a forecast traffic increase optimised the trajectory in line with the productivity plans based on a strategy to intensify the

Impairment test results

The recoverable amount of the assets tested totalled \notin 33.1 billion as at 31 December 2017. The terminal value, calculated using the indefinite projection of cash flows generated on 2030, represents 95.3% of this recoverable amount. As this value was slightly higher than the reference asset tested, SNCF Réseau maintained the same impairment loss of \notin 9.6 billion recognised as at 31 December 2015.

The estimates and assumptions taken into account to assess the recoverable amount of the assets are primarily based on the performance contract. This recoverable amount also depends on the French State's implementation of all the resources and commitments necessary for its support and the company's ability to meet its productivity plans. Actual results and certain future assumptions could differ significantly from the estimates adopted.

Sensitivity analyses

Sensitivity to the valuation parameters:

A change of +/- 10 basis points in the discount rate represents a change of -/+ \notin 1.3 billion in the recoverable amount.

A change of +/- 10 basis points in the perpetual growth rate results in a change of $+ \in 0.9$ billion.

Sensitivity to cash flows over the 2017-2030 period (including corporate tax impact):

A change of +/- €100 million in net annual renewal expenses represents a change of -/+ €2.4 billion in the recoverable amount. This amount is indicative only since, beyond a certain threshold, the impact of the change in renewal expenses on the recoverable amount of assets is not linear and the impacts

may be material for maintenance, traffic and therefore infrastructure fees.

An annual change of +/- \leq 100 million in the infrastructure fees or the backing of the French State represents a change of +/- 1.8 billion in the recoverable amount.

4.6 OPERATIONAL WORKING CAPITAL REQUIREMENT

In € millions	31/12/2017	31/12/2016
Inventories and work-in-progress	-41	-13
Operating receivables	-100	-166
Operating liabilities	61	552
Impact of the change in the WCR in the consolidated cash flow statement	-80	372

4.6.1 Inventories and work-in-progress

Inventories are stated at the lower of cost price and net realisable value. Cost price is equal to acquisition or production cost. Production cost comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

The cost of inventories is calculated using the weighted average cost method.

Inventories are written down based on the age, turnover and economic useful life of items.

As at 31 December 2017, inventories and work-in-progress break down as follows:

31/12/2017 31/12/2016 Gross Impairment Net Net Change In € millions 542 -114 429 401 28 Raw materials 73 0 73 Finished goods 67 6 27 0 27 25 2 Work-in-progress 529 642 -114 492 37 Inventories and work-in-progress

In € millions	31/12/2016	Charges	Reversals	Reclassification	31/12/2017
Raw materials and supplies - write-down	-109	-13	9	0	-114
Finished goods - write-down	0	0	0	0	0
Work-in-progress - write-down	0	0	0	0	0
Write-down of inventories	-109	-13	9	0	-114

4.6.2 Operating receivables

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On initial recognition, receivables are measured at fair value corresponding to their nominal value. The effect of discounting is taken into account for long-term receivables, where material. Receivables are subsequently measured using the effective interest rate method. An impairment loss is recognised when the fair value of the receivable at the balance sheet date is lower than the carrying amount. Receivables are written down to reflect the risk of nonrecovery, based on individual and/or statistical analyses.

Operating receivables break down as follows:

	31/12/2017			31/12/2016	
In € millions	Gross	Impairment	Net	Net	Change
Trade receivables and related accounts	1,345	-56	1,289	1,296	-7
Amounts payable to the French State and local authorities	516	0	516	511	6
Other operating receivables	584	-2	582	920	-338
Of which supplier credit notes receivable and advances	95	0	95	595	-500
Net operating receivables	2,446	-58	2,388	2,727	-339

Trade receivables and related accounts mainly comprised infrastructure fee receivables in the amount of €1,003 million and receivables arising from studies and construction work for third parties in the amount of €246 million as at 31 December 2017.

The change in "Other operating receivables" primarily corresponds to the sums paid in advance to suppliers under PPPs (BPL and CNM) and concessions (SEA).

Movements in the impairment of trade receivables and other operating receivables were as follows in 2017 and 2016:

In € millions	31/12/2016	Charges	Reversals	Changes in Group structure	3	1/12/2017
Trade receivables and related accounts - impairment	-46	-55	44		0	-57
Other operating receivables - impairment	-2	-1	2		0	-1
Total	-48	-56	46		0	-58

In € millions	31/12/2015	Charges	Reversals	Changes in Group structure	31/12/2016	
Trade receivables and related accounts - impairment	-20	-32	6		0	-46
Other operating receivables - impairment	-1	-1	0		0	-2
Total	-21	-33	6		0	-48

Trade receivables past due break down as follows (gross value):

			Past due but not impaired					
In € millions	Not past due	Impaired	< 3 months	4 to 6 months	7 to 12 months	> 12 months	Total	
As at 31 December 2017	1,005	56	217	20	11	35	1,345	
As at 31 December 2016	1,147	61	41	25	60	7	1,341	

Other operating receivables mostly mature in less than one year.

4.6.3 Grants receivable

A grant receivable is recognised when, for a project, the claimed funding amounts to less than the project's percentage completion at the balance sheet date.

In € millions	31/12/2017	31/12/2016
Grants to be collected	1,037	1,227
Grants to be claimed	623	680
Provisions for impairment	-68	-67
Total	1,592	1,839

Grants receivable break down as follows:

Grants to be collected break down as follows (gross value):

			P				
In € millions	Not past due	Impaired	< 3 months	4 to 6 months	7 to 12 months	> 12 months	Total
As at 31 December 2017	176	68	72	148	44	529	1,037
As at 31 December 2016	175	67	28	42	118	798	1,227
As at 31 December 2017, g				PROVISIO	NS		

over 12 months mainly concern the Regional Authorities for \notin 336 million and Agence de Financement des Infrastructures Transport de France (ATITF) for \notin 185 million. This amount reflects the difficulties in collecting the receivables relating to SEA projects and to a lesser extent phase 2 of the EE high-speed line from the financiers.

4.6.4 Operating payables and other accounts in credit

Operating payables are recorded at nominal value on issue, except for payables with a maturity of more than one year, which are discounted to present value where the impact of discount is material.

Operating payables break down as follows:

In € millions	31/12/2017	31/12/2016	Change
Trade payables and related accounts	2,198	2,180	18
o/w amounts payable to suppliers of PP&E	281	392	-111
Payments received on account for orders	257	279	-22
o/w advances received on sales of PP&E	1	6	-5
Employee-related liabilities Amounts payable to the	621	600	22
French State and local authorities	441	446	-6
Other operating payables	41	54	-13
Deferred income	770	788	-18
Total operating payables	4,327	4,347	-20

The -€513 million decrease in operating payables was mainly attributable to the payment of major instalments under the PPP and SEA concession agreements and settlement of freight yards transferred by SNCF Mobilités under the reform.

Provisions are recorded when, at the balance sheet date, SNCF Réseau has a present obligation to a third party as a result of a past event and the settlement of this obligation will require an outflow of company resources with no consideration.

This obligation may be legal, regulatory or contractual. It may also result from external practices or commitments that create valid expectations in third parties that SNCF Réseau will assume certain responsibilities.

The estimated amount of the provision reflects the outflow of resources that is likely to be necessary to settle SNCF Réseau's obligation. If a reliable estimate of this amount cannot be made, no provision is recorded. Disclosure is provided in the notes to the financial statements.

Provisions are discounted when the impact of the time value of money is deemed material. The discount rate is determined with reference to a closing market rate based on leading corporate bonds with a maturity comparable to the estimated maturity of the provision.

A contingent liability is a possible obligation that arises from past events whose existence will only be confirmed by the occurrence of uncertain future events not wholly within the control of SNCF Réseau, or a probable obligation where it is not probable that an outflow of resources will be required. Except for contingent liabilities recognised as part of a business combination, contingent liabilities are not recorded. Disclosure is provided in the notes to the financial statements.

In € millions	01/01/2017	Charges	Reversals (used)	Reversals (not used)	31/12/2017	of which current	of which non-current
Tax, employee and customs risks	53	4	0	0	57	0	57
Environmental risks	169	10	-13	0	167	0	167
Litigation and contractual risks	211	53	-19	-162	82	35	47
Other	5	2	-1	-2	4	4	0
Total provisions	438	71	-34	-165	310	39	271

4.7.1 Provisions for tax, employee-related and customs risks

SNCF Réseau respectively recognises provisions for tax, employee-related and customs risks when it has an obligation as a result of a past event towards the tax authorities, personnel and social security organisations or customs authorities. It sets aside provisions for challenged tax reassessments when it considers that an outflow of resources is probable.

- Ruling of the Paris Industrial Tribunal

The Paris Industrial Tribunal handed down its decisions on 21 September 2015 with respect to the appeals filed by former Moroccan employees. The Company accounted for the consequences in its financial statements based on the penalties handed down. An appeal was filed, thus suspending payment of the sums claimed. These first cases were argued before the Appeal Court in May 2017 and a ruling was handed down on 31 January 2018. Furthermore, new cases will be brought for the first time before the Industrial Tribunal and argued at the end of the first quarter 2018. An additional provision is set aside as and when new appeals are filed with the Paris Industrial Tribunal.

- Tax audit

SNCF Réseau was the subject of a tax audit concerning fiscal years 2012, 2013 and 2014 that resulted in the receipt of a tax reassessment at the end of July 2016.

The main grounds for reassessment involve the reclassification of TER access fees as a balancing grant, which directly subjected the company to the tax on wages and indirectly weakened the Infrastructure asset impairment test. This reassessment was formally challenged by the company. To date, the company has yet to receive a reply to its challenge.

The reassessments that were not challenged by the company were covered in a provision of €3 million.

Should the tax authorities maintain their position, SNCF Réseau will have recourse to litigation.

In 2017, SNCF Réseau rolled out the changes recommended by the tax legislation department as part of its response to the company's advance ruling request. These modifications involve the annual agreement between the French State and SNCF Réseau which determines access fees and the TER access fee invoices sent to the French State on behalf of the regions. They confirm the classification of TER access fees as revenue, in consideration for the services rendered, in accordance with the tax authorities.

- Appeal to the *Conseil d'Etat* for the calculation of old age contribution rates

In a decree of 2 May 2017, the final T1 rates for 2013, 2014, 2015 and 2016 were published in the *Journal Officiel*. They incorporate the new calculation method recommended by the company and approved by the *Conseil d'État* in its 2016 rulings.

Accordingly, accrued income of €8 million was recognised in the 2017 financial statements, under "Other operating income and expenses" in the income statement.

In a decree of 2 May 2017, the T2 rate, the other flat-rate contribution paid in discharge of liabilities to finance the special railway employee pension plan, was raised by 2 points (from 11.81% to 13.85%) as at 1 May 2017, i.e. a negative impact of €22 million in 2017. On 23 May 2017, the company filed an appeal with the French *Conseil d'État* in accordance with the decree of 28 June 2007

4.7.2 Environmental provisions

This provision covers the costs of environmental protection and site restoration and clean-up. It specifically includes a provision for the risk relating to the elimination of creosote-treated railway sleepers and machines containing polychlorinated biphenyls.

The French government decree of 3 June 2011 related to the protection of the public against health risks resulting from exposure to asbestos in buildings that came into effect on 1 February 2012 was to be accompanied by implementation decrees. These decrees were published at the end of December 2012 for an implementation date of 1 January 2013. They define the criteria for assessing the state of the materials to be investigated, the content of the report on the identification of asbestos-containing materials as well as the content of the asbestos technical file summary sheet. An action plan has been implemented covering the compliance of the asbestos technical analyses within the deadline stipulated by the new decree, i.e. by 2021.

Amounts recorded for site decontamination are based on the best possible estimate resulting from year-end assessments and take into account these valuations for known risks currently being assessed. Amounts recorded for the removal of asbestos from rolling stock correspond to the estimated costs at the end of the equipment's life. These costs are determined based on the prices currently invoiced by "scrap metal dealers and asbestos removers."

The environmental costs covered by provisions mainly involved the treatment of creosote-treated railway sleepers, building and rolling stock asbestos removal and site decontamination costs.

4.7.3 Provisions for contractual litigation and risks

The provision for contractual litigation and risks mainly includes risks associated with legal disputes and contract settlements in addition to contractual risks.

SNCF Réseau is involved in several unresolved legal disputes arising in the normal course of its activities.

Such disputes are provided based on an assessment of the related risk and the probability of realisation.

Unused reversals were mainly attributable to the elimination of risks related to current litigation or the adjustment to their measurement.

- Litigation regarding floods in Arles in December 2003

This litigation resulted in the full reversal of the provision following the favourable decision handed down on 15 November 2017 by the *Conseil d'Etat*, which rejected the appeal filed by the insurers.

- May/June 2016 flooding

Flooding in May and June 2016 gave rise to a provision for the "property damage" excess. This provision was partially reversed according to the accounting of repairs made.

The provision relating to the "losses of fees" was reversed in full.

- Eckwersheim TGV high-speed train accident

On 14 November 2015, a test train on the high-speed train derailed, leaving 11 dead and 42 injured in Eckwersheim, Alsace, on the new future East European line.

A provision for "civil liability" excess has been recorded in the accounts since the accident.

- Derailment in Culoz

On 24 July 2006, a work train comprising several components and partly belonging to SNCF and ETF derailed on the Rhône bridge between Culoz and Vions. The roles and responsibilities in the work train authorisation were shared between SNCF, the train designer and manufacturer and the owner. SNCF may be considered as partly responsible. The proceedings are still ongoing.

The remaining provisions cover contractual litigation and risks of individually immaterial amounts.

5 CAPITAL AND FINANCING

5.1 CAPITAL INJECTIONS

As a State-owned industrial and commercial institution, SNCF Réseau does not have any capital in the legal sense of the term, nor shares, nor does it pay dividends.

At the time of its creation, SNCF Réseau had equity of $\notin 0.86$ billion for accounting purposes, corresponding to the difference in value between its assets and liabilities. The French State then increased this initial capital by means of additional injections until early 2003.

As at 31 December 2017, capital injections totalled €9.8 billion.

5.2 NET DEBT AND NET INDEBTEDNESS

The IFRS net debt of SNCF Réseau is the sum of current and non-current borrowings,

- Plus:

o guarantee deposits received relating to debt hedging transactions,

o fair value of trading or debt hedging liability derivatives ("Liability derivatives"),

o debt arising leases recorded in the balance sheet,

o subordinated debt,

o debt arising from public-private partnership contracts ("PPP payables").

Less:

o guarantee deposits paid relating to debt hedging transactions,

o fair value of trading or debt hedging asset derivatives ("Asset derivatives"),

o available-for-sale financial assets,

o financial assets at fair value through profit or loss,

o financial receivables arising from public-private partnership contract financing agreements or relating to the financing of major railway investment projects ("PPP receivables"),

o cash and cash equivalents.

IFRS net debt excludes the following items:

- Group investments in the share capital of unconsolidated companies,

- Pension assets and liabilities which are covered by IAS 19 (see Note 7),

- Amounts payable on non-controlling interest purchase commitments (these are equity transactions and do not involve an exchange of cash flow).

The fair value of asset or liability derivative instruments is classified as current or non-current based on the final maturity of the derivative.

Financial assets or liabilities maturing in less than 12 months at the balance sheet date are recorded in current financial assets or current financial liabilities.

The loans, borrowings and fair value of derivative instrument line items include accrued interest.

For financial instruments recognised at fair value in the balance sheet, the fair value hierarchy is shown by category and comprises the following three levels under IFRS 13:

- Level 1: fair value measured using quoted prices by reference to the closing stock market price for listed financial instruments.

- Level 2: fair value measured using inputs other than quoted prices that are observable directly or indirectly on the market. It is used for unlisted financial instruments, for which there exists listed instruments of a similar nature and maturity and by reference to the stock market price of such instruments.

- Level 3: fair value determined using valuation techniques not based on observable market data. It is used for other unlisted instruments. The fair value is determined using valuation techniques such as the revalued net asset method, discounted cash flows or option valuation models.

5.2.1 Net borrowing costs

Net borrowing costs consist of:

- Interest paid on current and non-current borrowings,
- Interest received on available cash balances,
- Debt and cash foreign exchange gains and losses,
- Net changes in fair value and hedges,
 - o Gains and losses on financial instruments at fair value through profit or loss,
 - o The ineffective portion of hedging financial instruments,

o The change in fair value of borrowings using the fair value option.

These items are presented after hedging transactions and include fair value gains and losses on derivative instruments not qualified for IFRS hedge accounting.

"Net borrowing and other costs" breaks down as follows:

In € millions	31/12/2017	31/12/2016	Change
Debt and cash interest income and expense	-1,240	-1,140	-100
Foreign exchange gains and losses	-	-	-
Net changes in fair value and hedges	-8	-11	3
Net borrowing costs	-1,248	-1,152	-96
Other financial expenses	-27	-44	16
Other financial income	113	37	76
Net borrowing and other costs	-1,163	-1,158	-4
Finance costs of employee benefits	-9	-15	6
Finance cost	-1,172	-1,173	2

5.2.2 Net indebtedness

The following tables present the categories and classes of financial assets and liabilities as well as their valuation methods.

31/12/2017						Accounting	qualification			Fair value of	the class	
In € millions	Current	Non- current	Total	IFRS net debt and net indebtedne ss	At fair value through equity	Loans, receivables, debt at amortised cost	through	Qualified for hedging	Total	Level 1	Level 2	Level 3
Equity investments	-	0	0	-	-	0	-	-	0	-	0	-
Loans and receivables	1,084	255	1,338	1,338	-	1,338	-	-	1,338	1,084	255	-
Assets at fair value through profit or loss	50	-	50	50	-	-	50	-	50	50	-	-
Asset derivatives	33	1,059	1,092	1,092	-	-	15	1,077	1,092	-	1,092	-
PPP receivables	301	2,418	2,719	2,719	-	2,719	-	-	2,719	-	2,719	-
Financial assets	1,467	3,732	5,199	5,199	-	4,057	65	1,077	5,199	1,134	4,065	-
UCITS	2,231	-	2,231	2,231	-	-	2,231	-	2,231	2,231	-	-
Cash at bank and in hand	1,095	-	1,095	1,095	-	-	1,095	-	1,095	1,095	-	-
Cash and cash equivalents	3,326	-	3,326	3,326	-	-	3,326	-	3,326	3,326	-	-
Bonds	1,837	45,414	47,251	47,251	-	47,251	-	-	53,690	-	53,690	-
Bank borrowings	2	425	427	427	-	427	-	-	418	-	418	-
SNCF borrowings	26	665	691	691	-	691	-	-	981	-	981	-
Other borrowings	3	33	36	36	-	36	-	-	36	-	36	-
Borrowings, of which	1,869	46,537	48,405	48,405	-	48,405	-	-	55,126	-	55,126	-
Unhedged borrowings, measured at amortised cost	1,781	34,288	36,069	36,069	-	36,069	-	-	42,789	-	42,789	-
recognised using cash value hedge accounting	-	9,526	9,526	9,526	-	9,526	-	-	9,526	-	9,526	-
recognised using fair value hedge accounting	88	2,722	2,810	2,810	-	2,810	-	-	2,811	-	2,811	-
Liability derivatives	69	2,244	2,313	2,313	-	-	69	2,244	2,313	-	2,313	-
Overdrafts	23	-	23	23	-	23	-	-	23	23	-	-
Cash borrowings	1,678	-	1,678	1,678	-	1,678	-	-	1,678	1,678	-	-
PPP payables	270	2,465	2,736	2,736	-	2,736	-	-	2,736	-	2,736	-
Financial liabilities	3,909	51,246	55,155	55,155	-	52,842	69	2,244	61,875	1,701	60,175	-
IFRS net debt and net indebtedness				46,630								

31/12/2016					Accounting qualification				Fair value of the class			
In € millions	Current	Non- current	Total	Net debt (IFRS)	At fair value through equity	Loans, receivables, debt at amortised cost	through	Qualified for hedging	Total	Level 1	Level 2	Level 3
Equity investments	-	1	1	-	-	1	-	-	1	-	1	-
Loans and receivables	-	6	6	6	-	6	-	-	6	-	6	-
Assets at fair value through profit or loss	0	-	0	0	-	-	0	-	-	-	-	-
Asset derivatives	116	1,407	1,523	1,523	-	-	93	1,430	1,523	-	1,523	-
PPP receivables	147	2,390	2,537	2,537	-	2,537	-	-	2,537	-	2,537	-
Financial assets	263	3,804	4,067	4,067	-	2,544	93	1,430	4,067	-	4,067	-
UCITS	2,403	-	2,403	2,403	-	-	2,403	-	2,403	2,403	-	-
Cash at bank and in hand	827	-	827	827	-	-	827	-	827	827	-	-
Cash and cash equivalents	3,229	-	3,229	3,229	-	-	3,229	-	3,229	3,229	-	-
Bonds	2,031	42,399	44,430	44,430	-	44,430	-	-	52,026	-	52,026	-
Bank borrowings	2	425	427	427	-	427	-	-	436	-	436	-
SNCF borrowings	27	670	697	697	-	697	-	-	1,045	-	1,045	-
Other borrowings	3	35	39	39	-	39	-	-	39	-	39	-
Borrowings, of which	2,063	43,530	45,593	45,593	-	45,593	-	-	53,546	-	53,546	-
Unhedged borrowings, measured at amortised cost	1,760	32,343	34,103	34,103	-	34,103	-	-	42,056	-	42,056	-
recognised using cash value hedge accounting	-	8,136	8,136	8,136	-	8,136	-	-	8,136	-	8,136	-
recognised using fair value hedge accounting	303	3,051	3,354	3,354	-	3,354	-	-	3,354	-	3,354	-
Liability derivatives	22	2,265	2,287	2,287	-	-	22	2,265	2,287	-	2,287	-
Overdrafts	58	-	58	58	-	58	-	-	58	58	-	-
Cash borrowings	1,693	-	1,693	1,693	-	1,693	-	-	1,693	1,693	-	-
PPP payables	156	2,443	2,599	2,599	-	2,599	-	-	2,599	-	2,599	-
Financial liabilities	3,993	48,237	52,230	52,230	-	49,943	22	2,265	60,184	1,751	58,432	-
Net debt (IFRS)				44,934								

5.2.2.1 Financial assets

5.2.2.1.1 Loans and receivables

"Loans and receivables" mainly comprise receivables connected with shareholdings, current account advances to associates or unconsolidated entities, guarantee deposits as well as asset margin calls.

These loans and receivables are initially recognised at their fair value plus transaction costs. At each balance sheet date, these assets are measured at amortised cost using the effective interest rate method.

The guarantee deposits arising from leases are recognised at nominal value.

"Loans and receivables" primarily comprise asset margin calls (€1,084 million), due to the adjustment to a bilateral format, and the Eole piggy-backing (€249 million).

5.2.2.1.2 Assets at fair value through profit or loss

Trading assets consist of assets that the Group intends to sell in the near term in order to realise a capital gain and assets recorded in this category by designation.

Assets are measured at fair value at the balance sheet date and fair value gains and losses are recorded in finance cost.

The portfolio of negotiable debt securities maturing in over 3 months (and less than 1 year) comprised a €50 million treasury bill expiring on 11/01/2018.

5.2.2.1.3 PPP receivables

PPP receivables include grants yet to be claimed for ongoing PPP projects in the amount of \notin 2,719 million, including \notin 1,159 million for BPL, \notin 1,067 million for CNM and \notin 491 million for GSM-R.

These grants receivable from the French State and regional authorities enable SNCF Réseau to repay its debts with Eiffage, Oc'Via and Synerail for BPL, CNM and GSM-R, respectively.

Regarding BPL and CNM, SNCF Réseau has received grants and repaid the related borrowings (same amounts as the grants) from 2017, the year of project completion.

As the GSM-R project was not 100% financed, the grant receivable is lower than the related borrowing.

5.2.2.1.4 Positive fair value of derivative financial instruments

Derivative financial instruments are described in Note 5.3.

5.2.2.2 Cash and cash equivalents

Cash and cash equivalents consist of immediately available liquid assets (cash) and short-term investments, easily converted into a known amount of cash with an initial maturity of less than or equal to three months and which are exposed to a negligible risk of change in value. In particular, investments in French mutual funds (SICAV) and monetary funds with marginal sensitivity are classified in this category and notably French mutual funds and monetary funds classified by the French Financial Markets Authority (AMF) in the Euro monetary category or which have a sensitivity of less than 0.25 basis points.

For these securities, the fair value adopted is the UCITS net asset value. The fair value falls under Level 1 of the fair value hierarchy set forth in paragraph 7.2 of IFRS 13. These securities are valued at fair value and fair value gains and losses are recorded in finance cost.

However, considering their residual life at closing, other investments, particularly, negotiable debt securities, are recognised at nominal value, as the Group considers this to be a reasonable estimate of their market value.

Current bank facilities classified as current financial liabilities are included in cash and cash equivalents in the cash flow statement.

In € millions	31/12/2017	31/12/2016	Change
Monetary mutual funds equivalent to cash and negotiable debt securities maturing in less than three months(*)	2,231	2,403	-172
Cash at bank and in hand	1,095	827	268
Cash and cash equivalents in the statement of financial position	3,326	3,229	96
Current bank facilities	23	58	-35
Cash and cash equivalents in the cash flow statement	3,303	3,171	131

(*) including deposits and commercial paper

5.2.2.3 Financial liabilities

Borrowings and other financial liabilities are initially measured at fair value less transaction costs and subsequently at amortised cost determined using the effective interest rate.

Certain borrowings are subject to fair value or cash flow hedge accounting. In addition, certain borrowings with detachable embedded derivatives recorded using hedge accounting are recorded at fair value (fair value option). Fair value gains and losses are recorded in finance cost.

The option to record liabilities at fair value through profit or loss is used when the corresponding liabilities comprise an embedded derivative significantly modifying the cash flows which would otherwise result in the contract or where the Group is unable to value the embedded derivative separately.

The fair value of financial liabilities is determined using measurement techniques such as option valuation models or the discounted cash flow method. The models take into account assumptions based on market data at the balance sheet date.

5.2.2.3.1 Net debt

SNCF Réseau raises funds on international capital markets in order to cover its long-term financing needs, mainly through bond issues and private placements and, to a lesser extent, borrowings from banks and/or local authorities.

The IFRS net debt carrying amount totalled €46.6 billion, compared to €44.9 billion as at 31 December 2016, i.e. an increase of €1.7 billion.

In € millions	31/12/2017	31/12/2016
Net debt repayment amount	45,243	42,007
Remeasurement of nominal amounts at the closing rate	-1,086	-
Accrued interest receivable on long-term debt	673	651
Asset and liability margin calls (collateral)	-1,019	34
PPP Payables and Receivables	-6	-
French GAAP net debt	43,804	42,692
Long-term debt	1,580	1,347
Short-term debt	-7	60
Asset and liability derivatives	1,221	764
Cash and cash equivalents	3	4
Other financial assets	4	5
PPP Payables and Receivables	23	62
IFRS net debt	46,630	44,934

5.2.2.3.2 Financing raised in 2017

In € millions		Nominal amount	Currency	Maturity date	Inflation-indexed
Bond issues					
EMTN RFF AUD 3.724% 26/04/2027		90	AUD	26/04/2027	3.724%
EMTN SNCFR 1.125% 19-05-2027		650	EUR	19/05/2027	1.125%
EMTN RFF EUR 1.875% 30/03/2034	GREEN BOND	1,000	EUR	30/03/2034	1.875%
EMTN SNCFR 1.50% 29-05-2037		250	EUR	29/05/2037	1.500%
EMTN RFF IPCH+0.35% 25-07-2047		400	EUR	25/07/2047	0.350%
EMTN RFF IPCH+0.542% 25-07-2047		57	EUR	25/07/2047	0.542%
EMTN SNCFR 2.25% 20-12-2047	GREEN BOND	750	EUR	20/12/2047	2.250%
EMTN SNCFR 2.303% 11-07-2067		50	EUR	11/07/2067	2.303%
EMTN RFF HKD 2.77% 13/10/2025		937	HKD	13/02/2025	2.770%
EMTN SNCF RESEAU ZC 0% 19-05-2047		10,000	JPY	19/05/2047	0.000%
EMTN RFF SEK 2.83% 28/04/2047		500	SEK	28/04/2047	2.830%
EMTN SNCF RESEAU SEK 2.49% 12-06-2047		510	SEK	12/06/2047	2.490%
EMTN SNCF RESEAU SEK 2.425% 22/06/2047		440	SEK	22/06/2047	2.425%
EMTN SNCF RESEAU SEK 2.455% 22/06/2047		440	SEK	22/06/2047	2.455%
EMTN SNCFR 2.581% 30-10-2047		400	SEK	30/10/2047	2.581%
EMTN SNCFR 2% 13-10-2020		1,500	USD	13/10/2020	2.000%

5.2.2.3.3 SNCF borrowings

When RFF was established on 1 January 1997, a €20.5 billion debt with SNCF was transferred to its liabilities. Since the implementation on 1 July 2015 of the rail reform law of 4 August 2014, this debt has been recorded in SNCF Réseau's liabilities.

The total amortised cost of the SNCF long-term debt breaks down as follows:

in millions	Nominal foreign currency amount	Currency	Average maturity	IFRS value in euros
SNCF borrowings				691
Fixed	613	EUR	2023	635
Floating	56	EUR	2021	57

5.2.2.3.4 Bank and other borrowings

in millions	Nominal foreign currency amount	Currency	Average maturity	IFRS value in euros
Bank borrowings				427
2007 EIB Ioan	75	EUR	2033	75
2016-1 EIB Ioan	200	EUR	2038	202
2016-2 EIB Ioan	150	EUR	2038	150
Other borrowings, including				36
Loan from Greater Paris region	34	EUR	2028	32
Deposits and securities				5

Deposits and securities mainly correspond to the guarantee deposits received for non-current assets leased by third parties to SNCF Réseau.

SNCF Réseau also has a 5-year €1.5 billion syndicated credit facility, which expires on 29 June 2022. This credit facility was not used in 2017.

5.2.2.3.5 Negative fair value of derivative financial instruments

Derivative financial instruments are described in Note 5.3.

5.2.2.3.6 Cash borrowings and overdrafts

For its internal financing and cash management, SNCF Réseau uses both national and international short-term financing and investment instruments such as "Treasury bills" and

"Commercial Paper", granting diversified access to liquid financial resources. Foreign-currency denominated negotiable debt securities are hedged using currency swaps.

Cash borrowings primarily comprise:

- Short-term liabilities of more than 3 months and less than 1 year (€1,613 million as at 31/12/2017 vs. €1,659 million as at 31/12/2016)
- Liability margin calls (€64 million as at 31/12/2017 vs. €34 million as at 31/12/2016).

The amortised cost of cash borrowings (excluding cash collateral) breaks down as follows:

In € millions	Total amount	Maturity 0 to 6 months	Maturity 6 to 12 months	Maturity 1 year or more
Short-term debt	1,613	1,367	247	-
USD	1,613	1,367	247	-

Overdrafts (\notin 23 million as at 31/12/2017 vs. \notin 58 million as at 31/12/2016) mainly comprise current accounts and bank loans.

5.2.2.4 Debt classified as French State debt

Pursuant to Article 2111-17-1 of the rail reform, SNCF Réseau publishes every year the amount of reclassified debt in the French State debt as well as the related forecast changes.

As part of the reorganisation of government debt as defined by the Maastricht Treaty, a portion of SNCF Réseau's debt was recorded by INSEE as government debt totalling €10.9 billion in 2014. This reclassification did not lead to a change in the SNCF Réseau financial statements. SNCF Réseau also remains responsible for the operating management of the debt, without any change in former practices.

5.2.2.5 PPP payables

The BPL, CNM and GSMR borrowings relate to the Brittany-Loire, Nîmes-Montpellier Bypass and Global System for Mobile communication for Railways PPPs. They represent SNCF Réseau's debt to its partners that are pre-financing part of the projects. Since 2017, SNCF Réseau has repaid the BPL and CNM debts.

Claims were received by the company in 2015 and 2017 for the CNM and BPL PPPs for €634 million. These claims were mostly challenged by the company and only the accepted portion was recognised.

5.2.3 Reconciliation with cash flow from/(used in) financing activities

The following table can be used to reconcile between balance sheet debt headings and cash flows from/(used in) financing activities:

		Cash fl	ow from/(used	(used in) financing activities Cash flow from/(used		from/(used	"Non-cash" cł		
In € millions	31/12/2016	Borrowing issues	Borrowing repayments	Change in accrued interest *	Cash in cash liabilities	in) investing activities **	Fair value changes	Other	31/12/2017
Liabilities	52,172	4,878	-1,450	-14	107	217	-762	-17	55,132
Bonds	44,430	4,878	-1,377	-20	-	-	-661	-0	47,251
Bank borrowings	427	-	-	1	-	-	-	-1	427
SNCF borrowings	697	-	-6	-0	-	-	-	-	691
Other borrowings	39	-	-3	-	-	-	-	1	36
Liability derivatives	2,287	-	-	4	-	-	22	-	2,313
Cash liabilities	1,693	-	-	-	107	-	-123	-	1,678
PPP payables	2,599	-	-63	-	-	217	-	-17	2,736
Assets	4,061	-	-63	15	1,133	223	-446	22	4,944
Cash collateral (assets)	-	-	-	-	1,084	-	-	-	1,084
Asset derivatives	1,523	-	-	15	-	-	-446	-	1,092
PPP receivables	2,537	-	-63	-	-	223	-	22	2,719
TOTAL = Liabilities - Assets	48,112	4,878	-1,386	-29	-1,026	-6	-317	-38	50,188

* The "Changes in accrued interest" column corresponds to "Net borrowing costs paid" in the cash flow statement adjusted for the "elimination of net borrowing costs" in the cash flow statement.

** The cash flows relating to PPP receivables and payables prior to project commissioning are classified in cash flows from/(used in) investing activities. Projects were commissioned in 2017.

5.3 MANAGEMENT OF FINANCIAL RISKS AND DERIVATIVE INSTRUMENTS

In SNCF Réseau, the management of transactions and financial risks is strictly governed by the "Principles and limits for trading on capital markets" issued by the Board of directors.

This document notably sets out the key policy focus in the areas of financing, treasury and overall debt management, the management principles and limits authorised in respect of interest rate, currency and counterparty risks, optimisation transactions, authorised instruments, the ceilings applicable to financing programmes, investment products and delegations of authority granted by the Board of directors together with delegations of signature granted.

SNCF Réseau also has a manual procedure which specifies the controls to be performed and the manner in which they are to be carried out in order to ensure that, on a day-to-day basis, transactions entered into comply with the defined limits and principles and the target debt structure.

SNCF Réseau also prepares different types of reports on a daily, weekly or monthly basis which describe the transactions performed and control results.

SNCF Réseau is exposed to the following risks related to the use of financial instruments:

- Market risks:

- o Interest rate risk
- o Currency risk
- Liquidity risk
- Credit and counterparty risk

5.3.1 Management of interest rate risk

As part of its financial strategy and to limit its exposure to an increase in its financial expenses, SNCF Réseau has defined principles in order to minimise its exposure to interest rate risk.

5.3.1.1 Debt structure

The breakdown by interest rate of loans and borrowings, before and after adjustment for derivatives (hedging and trading), is as follows:

Debt structure	Before h	After hedging		
In € millions	31/12/2017	31/12/2016	31/12/2017	31/12/2016
Fixed rate	43,402	41,064	42,977	40,087
Floating rate	1,484	1,492	3,351	3,908
Inflation rate	3,520	3,037	2,078	1,597
Total LT borrowings	48,405	45,593	48,405	45,593
ST borrowings	1,613	1,659	1,613	1,659
Total loans and borrowings	50,019	47,252	50,019	47,252

5.3.1.2 Sensitivity of financial instruments to interest rate risks

The sensitivity of profit or loss to the risk of interest rate fluctuations is related to:

- floating-rate net debt after taking into account hedges;

- fair value option debt;

- derivative instruments not qualified as hedges in the meaning of IAS 39;

- derivative instruments designated as cash flow hedges.

The sensitivity of recyclable reserves (equity) to the risk of interest rate fluctuations is related to derivatives qualified as cash flow hedges.

The sensitivity of cash flows of floating-rate instruments was calculated taking into account all variable cash flows of nonderivative instruments and derivative instruments. Derivative instruments not designated as hedges and separately recognised embedded derivatives generate a certain degree of volatility in net finance cost.

Conversely, changes in the value of derivatives designated as cash flows hedges generate a certain degree of volatility in equity.

Sensitivity analyses are prepared assuming that the level of debt and financial instruments in the balance sheet on 31 December remains constant during one year.

Given the relatively low market rates in 2017, SNCF Réseau decided to perform its sensitivity analyses based on a change in rates of +/-50 basis points.

A change of +/-50 basis points in euro interest rates at the balance sheet date would have the effect of increasing (or decreasing) equity and profit or loss in the amounts presented below. For the purposes of this analysis, other variables, and particularly exchange rates, have been assumed to remain constant. A similar analysis, prepared on the same basis, is presented for 2016.

	31/12/2017				31/12/2016			
	Profit o	r loss	Equi	ty	Profit/	loss	Equi	ty
In € millions	Impact after change in interest rates of			Impact after change in interest rates of				
Type of instrument	+50 bp	-50 bp	+50 bp	-50 bp	+50 bp	-50 bp	+50 bp	-50 bp
Floating-rate financial instruments (after taking into account hedges);	6	-6	-	-	7	-7	-	-
Floating-rate net debt (after taking into account fair value hedges)	6	-6	-	-	7	-7	-	-
Fair value option debt	-	-	-	-	-	-	-	-
Derivatives not qualified as hedges	2	-2	-	-	2	-3	-	-
Derivatives qualified as cash flow hedges	15	-18	726	-812	22	-26	747	-840
Total impact	23	-26	726	-812	31	-36	747	-840

5.3.2 Management of currency risk

5.3.2.1 Net foreign currency exposure

As part of its financial strategy which aims to diversify access to sources of finance and optimise finance costs, SNCF Réseau issues bonds in foreign currencies that are covered by currency

hedges. The foreign currency denominated cash flows (principal payments and interest) are hedged by currency derivatives which convert this debt into euro debt.

In millions of foreign currency	Net foreign currency exposure									
31/12/2017	AUD	CAD	CHF	GBP	HKD	JPY	NOK	SEK	USD	
Foreign currency-denominated debt	90	277	1,945	3,605	937	55,066	500	2,290	2,620	
Foreign currency derivatives	90	277	1,945	3,605	937	55,066	500	2,290	2,620	
Net foreign currency exposure	-	-	-	-	-	-	-	-	-	
31/12/2016	AUD	CAD	CHF	GBP	HKD	JPY	NOK	SEK	USD	
Foreign currency-denominated debt	-	277	1,945	3,595	-	45,000	500	-	1,220	
Foreign currency derivatives	-	277	1,945	3,595	-	45,000	500	-	1,220	
Net foreign currency exposure	-	-	-	-	-	-	-	-	-	

5.3.2.2 Foreign currency-denominated transactions and exchange rates

Monetary items in the balance sheet are retranslated at the closing exchange rate at each balance sheet date, and the resulting translation differences are recorded in profit or loss or as a separate equity component if they relate to hedging transactions qualifying as net investments or cash flow hedges under IFRS.

The commercial activities of the Group do not expose it to material foreign currency risk.

Excluding subsidiaries operating in their own country, SNCF Réseau's net indebtedness denominated in currencies other than the euro is managed in line with the acceptable risk limit defined in the same general framework. SNCF Réseau uses currency swaps for this purpose, generally set up when the borrowing is issued.

ECB rates	31/12/2017	31/12/2016
AUD	1.5346	1.4596
CAD	1.5039	1.4188
CHF	1.1702	1.0739
GBP	0.8872	0.8562
HKD	9.3720	8.1751
JPY	135.0100	123.4000
NOK	9.8403	9.0863
SEK	9.8438	9.5525
USD	1.1993	1.0541

Closing exchange rates for the main currencies are as follows:

5.3.2.3 Debt structure before and after currency hedging

The breakdown by currency of loans and borrowings, before and after adjustment for derivatives (hedging and trading), is as follows:

Debt structure	Before he	After hedging		
In € millions	31/12/2017	31/12/2016	31/12/2017	31/12/2016
Euro	38,857	37,116	48,405	45,593
Pound sterling	4,410	4,573	-	-
US dollar	2,186	1,159	-	-
Yen	430	394	-	-
Swiss franc	1,836	2,034	-	-
Norwegian krone	63	69	-	-
Swedish krona	236	-	-	-
Canadian dollar	226	248	-	-
Hong Kong dollar	102	-	-	-
Australian dollar	59	-	-	-
Total borrowings	48,405	45,593	48,405	45,593

5.3.3 Liquidity risk management

Due to the proactive management of its liquidity, the quality of its signature and its frequent presence on international capital markets, SNCF Réseau enjoys diversified access to both shortterm (treasury bills, commercial paper) and long-term (public and private bond issues) financing sources. SNCF Réseau also has a 5-year €1.5 billion syndicated credit facility, which expires on 29 June 2022. This credit facility was not used in 2017.

5.3.3.1 Maturity schedule of loans and borrowings (including derivatives)

In € millions	31/12/2017	31/12/2016
Less than 1 year	1,187	1,407
1 to 5 years	10,999	7,973
5 to 10 years	14,050	16,408
10 to 20 years	13,860	12,258
20 years and thereafter	8,146	7,259
Loans and borrowings excluding the fair value impact	48,243	45,306
Changes in fair value (designated at "fair value")	-	-
Changes in fair value (hedge accounting)	162	287
Loans and borrowings	48,405	45,593
Fair value of non-current asset and liability derivatives	1,185	858
Fair value of current asset and liability derivatives	36	-94
Loans and borrowings (including asset and liability derivatives)	49,626	46,357

5.3.3.2 Maturity schedule of contractual cash flows

			31/12/2	017			31/12/2016					
In € millions	Total	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter	Total	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
Bonds	-64,235	-2,510	-15,721	-16,980	-17,210	-11,815	-64,497	-2,855	-13,129	-22,031	-15,739	-10,742
Principal	-45,738	-1,107	-10,556	-12,598	-13,007	-8,470	-45,055	-1,395	-7,711	-17,288	-11,422	-7,240
Interest cash flow	-18,497	-1,403	-5,165	-4,382	-4,202	-3,345	-19,441	-1,460	-5,418	-4,744	-4,317	-3,503
Bank borrowings	-509	-4	-16	-20	-115	-354	-521	-4	-17	-21	-119	-359
Principal	-425	-	-	-	-75	-350	-425	-	-	-	-75	-350
Interest cash flow	-84	-4	-16	-20	-40	-4	-95	-4	-17	-21	-44	-9
SNCF borrowings	-995	-59	-267	-669	-0		-1,055	-60	-271	-724	-0	-0
Principal	-670	-5	-50	-614	-0	-	-676	-6	-55	-615	-0	-0
Interest cash flow	-325	-54	-217	-54	-	-	-379	-54	-216	-109	0	0
Other borrowings	-34	-3	-12	-11	-4	-5	-37	-3	-12	-13	-6	-4
Principal	-38	-3	-14	-12	-4	-5	-42	-3	-14	-14	-6	-4
Interest cash flow	4	1	2	1	0	-	5	1	2	1	0	-
Cash borrowings and overdrafts	-1,633	-1,633	-	-	-		-1,495	-1,495	-	-	-	-
Principal	-1,620	-1,620	-	-	-	-	-1,482	-1,482	-	-	-	-
Interest cash flow	-13	-13	-	-	-	-	-13	-13	-	-	-	-
Gross borrowings	-67,406	-4,208	-4,254	-16,015	-17,680	-17,329	-67,604	-4,416	-13,429	-22,789	-15,863	-11,106
Financial assets	255	-230	110	-183	662	-	6	0	-	-	-	6
Interest cash flow on hedging derivatives - negative fair value	-858	15	-36	-247	-376	-213	-1,022	-29	-98	-272	-422	-201
Interest cash flow on trading derivatives - negative fair value	-27	-4	-11	-0	-3	-10	-35	-4	-15	-0	-2	-13
Interest cash flow on hedging derivatives - positive fair value	711	21	24	162	317	187	1,287	96	278	251	428	234
Interest cash flow on trading derivatives - positive fair value	14	1	3	3	6	1	13	1	2	3	5	3
Derivative financial instruments	-160	33	-20	-82	-57	-34	242	63	166	-18	9	22
Liability margin calls	-64	-64	-	-	-	-	-34	-34	-	-	-	-
Asset margin calls	1,084	1,084	-	-	-	-	-	-	-	-	-	-
PPP payables	-4,380	-289	-1,125	-1,177	-1,789	-	-4,139	-162	-1,041	-1,157	-1,735	-45
Principal	-2,736	-270	-915	-759	-791	-	-2,599	-156	-874	-769	-785	-16
Interest cash flow	-1,645	-18	-210	-418	-998	-	-1,540	-6	-167	-389	-950	-30
Grant receivable - PPP	4,336	318	1,113	1,116	1,789	-	4,047	152	1,020	1,096	1,735	44
Principal	2,719	301	907	720	792	-	2,537	147	858	732	785	15
Interest cash flow	1,617	17	206	396	998	-	1,510	5	161	364	950	30
PPP payables and receivables	-44	30	1	-12	-62	0	-93	-10	-21	-61	-	-1

For financial liabilities, contractual cash flows are not discounted, corresponding to amounts to be repaid, including interest, with the floating-rate portion is pegged to the fixing as at 31 December.

5.3.4 Credit and counterparty risk management

Credit risk is the risk of financial loss for SNCF Réseau should a customer or counterparty to a financial instrument fail to meet its contractual obligations

The carrying amount of financial assets represents the maximum exposure to credit risk.

The credit value (CVA) and debit value (DVA) adjustments were not recorded as they had an immaterial impact on the value of derivatives as at 31/12/2017.

SNCF Réseau is exposed to counterparty risk in connection with its cash investments and the subscription of derivatives from its financial partners, insofar as the debtor refuses to honour all or part of its commitment or does not have the means to respect it.

To manage and limit this risk, investment instruments and derivatives are only entered into with financial institutions corresponding to the credit rating and equity criteria validated by the SNCF Réseau Board of directors.

A limited commitment amount by institution is determined according to these criteria.

Compliance with the authorised threshold by counterparty is monitored on a daily basis.

To hedge counterparty risk regarding its derivative financial instruments, SNCF Réseau performs margin calls with its financial counterparties whose rating is lower than the threshold defined by the Board of directors. Collateral (in cash only) is called up in the amount of the market value of the financial instrument portfolios for each counterparty whom SNCF Réseau is at risk.

The transactions which could generate counterparty risk are mainly financial investments and financial instruments as described below.

5.3.4.1 Financial investments

The general framework defines the counterparty approval procedure, which is based on a quantitative and qualitative analysis of counterparties.

Volume limits according to investment terms are defined for each counterparty, taking into account its rating. The extent to which authorised limits are used, based on the nominal amount of the transactions, is measured daily and reported.

Financial investments are diversified. They primarily consist of negotiable debt instruments (certificates of deposit, commercial paper), treasury note repos and subscriptions to French money market mutual funds (UCITS). Given their short residual term and breakdown, no major credit risk exposure is generated.

5.3.4.2 Derivative financial instruments

Derivative transactions seek to manage interest rate and foreign currency risk.

The general framework defines the counterparty approval procedure, which is based on a quantitative and qualitative analysis of counterparties. Investment volume and term limits are also defined for each counterparty. Investment volume and term limits are also defined for each counterparty, taking into account its equity and rating.

The extent to which authorised limits are used is measured daily and reported.

The counterparty approval procedure for derivative products also involves the signature of a framework agreement. A collateral agreement is also signed with certain counterparties in order to limit counterparty risk.

Pursuant to the amendment to IFRS 7 "Disclosures Offsetting Financial Assets and Financial Liabilities," the following tables present the fair value of foreign currency and interest rate derivative instruments used by SNCF Réseau, entered into under framework agreements comprising an enforceable master netting clause.

The "Cash collateral" column corresponds to the outstanding on collateralisation agreements for derivative financial instruments that do not meet the offsetting criteria established by IAS 32 "Financial instruments: Presentation."

31/12/2017	Gross amounts (a)	Amounts offset in the balance sheet (b)	Net amounts presented in the balance sheet (c=a-b)	Amounts no balanc	Net amounts based on IFRS 7 (f=c-d-e)	
In € millions				Cash collateral (d)	Derivative instruments (e)	
Asset derivatives	1,092	-	1,092	64	1,024	4
Liability derivatives	2,313	-	2,313	1,044	1,024	246

31/12/2016		Amounts offset in the balance sheet (b)	Net amounts presented in the balance sheet (c=a-b)		offset in the sheet	Net amounts based on IFRS 7 (f=c-d-e)
In € millions				Cash collateral (d)	Derivative instruments (e)	
Asset derivatives	1,523	-	1,523	33	1,299	191
Liability derivatives	2,287	-	2,287	-	1,299	988

5.4 ACCOUNTING POSITION OF DERIVATIVE INSTRUMENTS

The derivative instruments used by the Group to manage currency and interest rate risks are initially recognised at fair value and remeasured in the balance sheet to their fair value at closing. Fair value is determined using measurement techniques such as option valuation models or the discounted cash flows method. The models fall under Level 2 of the fair value hierarchy set forth in paragraph 81 of IFRS 13.

Changes in the fair value of derivative financial instruments that are not associated with operations and not part of a designated hedging relationship as defined by IAS 39 are recorded in profit or loss for the period, in finance cost. Hedge accounting depends on their designation.

To hedge its exposure to interest rate and currency risks, SNCF Réseau uses derivative instruments that may or may not be designated as hedges for accounting purposes.

The main derivatives used are interest rate swaps, forward currency contracts and cross currency swaps.

5.4.1 Derivative instruments by accounting treatment

The fair value of derivative instruments recognised in the balance sheet breaks down as follows:

		31/12/2017				
In € millions	Current	Non-current	Total	Current	Non-current	Total
Cash flow hedging derivatives	-	552	552	-	672	672
Fair value hedging derivatives	18	507	525	23	735	759
Trading derivatives	15	-	15	93	-	93
Asset derivative instruments	33	1,059	1,092	116	1,407	1,523
Cash flow hedging derivatives	-	2,108	2,108	0	2,201	2,201
Fair value hedging derivatives	-	137	137	-	64	64
Trading derivatives	69	-	69	22	-	22
Liability derivative instruments	69	2,244	2,313	22	2,265	2,287

5.4.1.1 Cash flow hedging derivatives

The Group trades on the derivatives market to hedge floatingrate receivables and payables.

When IAS 39 criteria are met, the derivative instruments are designated as cash flows hedges and fair value gains and losses are recorded directly in a specific account in other comprehensive income, except for the ineffective portion of the hedge, which is recorded in profit or loss. When the hedged item impacts profit or loss, the amounts deferred in other comprehensive income are released to profit or loss to match the flows of the hedged item.

Cash flow hedging derivatives have the following underlyings:

31/12/2017	Fair value of derivatives								
In € millions	Total	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter			
Bonds	-1,516	-	-202	45	-908	-451			
Non-bond borrowings	-40	-	-	-	-40	-			
Total	-1,556	-	-202	45	-948	-451			

31/12/2016	Fair value of derivatives								
In € millions	Total	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter			
Bonds	-1,484	-	-23	38	-901	-598			
Non-bond borrowings	-45	-	-	-	-45	-			
Total	-1,529	-	-23	38	-946	-598			

Cash flow hedging derivatives break down as follows:

31/12/2017		sheet fair lue		l foreign ⁄ amount	Cash flow hedge					20
	Assets	Liabilities	Assets	Liabilities	reserve	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereaft
In € millions						year				er
Floating-rate lender / fixed rate borrower swaps in euros	57	534	1,504	2,725	-499	-51	-186	-109	-128	-24
Fixed-rate lender / fixed-rate borrower swaps in euros	1	4	120	156	-4	-1	-2	-1	-	-
Floating-rate / fixed-rate cross currency swaps	16	-			1	0	0	0	0	-
GBP	16	-	50	-	1	0	0	0	0	-
Fixed-rate / fixed-rate cross currency swaps	297	1,567			-745	-71	-242	-227	-195	-10
AUD	-	5	-	90	-0	-0	-0	-0	-	-
CHF	85	-	450	-	15	1	5	5	4	-
GBP	208	1,422	650	1,826	-709	-59	-222	-229	-193	-6
HKD	-	10	-	937	-0	-0	-0	-0	-	-
JPY	-	20	-	35,000	-13	-4	-9	-	-	-
SEK	-	11	-	2,290	-8	-0	-1	-1	-3	-3
USD	4	100	120	2,500	-30	-9	-15	-1	-3	-2
Fixed-rate / floating-rate cross currency swaps	182	2			254	20	67	75	92	-0
+ Floating-rate / fixed-rate swap										
CAD	20	-	144	-	10	1	2	3	4	-
GBP	95	2	329	50	231	14	57	72	88	-0
CHF	67	-	253	-	14	5	8	-	-	-
Future issue pre-hedging transactions	-	-			11	1	5	2	3	-
Total	552	2,108			-981	-101	-359	-259	-228	-34

31/12/2016	Balance s val			l foreign amount	Cash flow hedge					20 years
	Assets	Liabilities	Assets	Liabilities	reserve	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	and thereaft
In € millions Floating-rate lender / fixed rate										er
borrower swaps in euros	27	646	2,118	2,978	-639	-50	-181	-144	-217	-46
Fixed-rate lender / fixed-rate borrower swaps in euros	1	5	120	156	-4	-1	-2	-2	-	-
Floating-rate / fixed-rate cross currency swaps	17	-			1	0	0	0	0	-
GBP	17	-	50	-	1	0	0	0	0	-
Fixed-rate / fixed-rate cross currency swaps	376	1,550			-984	-98	-386	-347	-301	148
AUD	-	-	-	-	-	-	-	-	-	-
CHF	140	-	450	-	35	3	11	14	8	-
GBP	169	1,550	375	2,301	-984	-95	-381	-357	-303	153
НКД	-	-	-	-	-	-	-	-	-	-
JPY	8	-	25,000	-	-10	-2	-7	-	-	-
SEK	-	-	-	-	-	-	-	-	-	-
USD	58	-0	1,120	-	-25	-3	-8	-3	-6	-5
Fixed-rate / floating-rate cross currency swaps	251	0			280	22	77	75	107	-0
+ Floating-rate / fixed-rate swap	24				10	4	2	,	,	
CAD	31	-	144	-	13	1	3	4	6	-
GBP	124	0	369	-	243	14	56	71	101	-0
USD	-	-	-	-	-	-	-	-	-	-
CHF	97	-	253	-	24	7	18	-	-	-
Future issue pre-hedging transactions	-	-			12	1	5	3	3	-
Total	672	2,201			-1,334	-126	-487	-415	-408	102

Change in recyclable reserves relating to cash flow hedges

The income (expense) deferred in equity includes the foreign currency impact recognised on cash flow hedges.

The impacts on equity, profit or loss for the period and reserves break down as follows:

In € millions	Recyclable equity
01/01/2016	-1,128
Recycled in profit or loss	582
Changes in effective portion	-789
31/12/2016	-1,334

In € millions	Recyclable equity
01/01/2017	-1,334
Recycled in profit or loss	448
Changes in effective portion	-95
31/12/2017	-981

The change in recyclable reserves totalled -€207 million in 2016 and €353 million in 2017

5.4.1.2 Fair value hedging derivatives

SNCF Réseau also uses derivative instruments to hedge the fair value of fixed-rate receivables and payables denominated in euro and foreign currencies.

When IAS 39 criteria are met, the derivative instruments are designated as fair value hedges and:

- fair value gains and losses arising on the derivative are recorded in profit or loss for the period,

- the hedged item is initially recognised at amortised cost and remeasured to its fair value at the balance sheet date, for the hedged portion of the risk, through profit or loss.

As such, fair value gains and losses on the derivative and the hedged item cancel out in profit or loss, except for the ineffective portion of the hedge.

In € millions	31/12/2017	31/12/2016
P&L impact of loan remeasurements	124	21
Change in fair value of asset derivatives	-97	-18
Change in fair value of liability derivatives	-39	-19
Fair value hedging ineffectiveness	-13	-15

5.4.1.3 Derivatives not qualified for hedge accounting

These are derivative financial instruments corresponding to economic hedges that do not satisfy IAS 39 requirements to be qualified for hedge accounting. If a derivative financial instrument has not been (or is no longer) qualified for hedge accounting, its successive fair value changes are directly recognised in profit or loss for the period, within a specific heading, e.g. Mark-to-market or MtM on operating financial instruments under finance cost for foreign currency, interest rate or equity derivatives

		31/12/	2017		31/12/2016			
	Fair value	e in euros	Notiona currency		Fair value	e in euros	Notional currency	
_in millions	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Asset derivative instruments	0	51			75	-		
US dollar	0	51	100	1,843	75	-	1,562	-
Interest rate derivatives (euros)	1	16	60	146	0	22	50	337
Embedded derivatives (euros)	14	1	211	156	18	0	211	156
Total derivatives not qualified for hedging	15	69			93	22		

5.4.2 Derivatives by type of instrument

5.4.2.1 Asset derivative instruments

SNCF Réseau regularly operates on the foreign currency derivatives market, primarily in order to hedge borrowings issued. The fair value of these instruments in the balance sheet breaks down as follows by instrument and transaction type:

Balance sheet fair value as at 31/12/2017 Balance sheet fair value as at 31/12/2016

In € millions	Cash flow hedge	Fair value hedge	Trading	Total	Cash flow hedge	Fair value hedge	Trading	Total
Currency swaps	495	447	-	942	644	663	-	1,308
Forward foreign currency purchases	-	-	0	0	-	-	75	75
Asset derivative instruments	495	447	0	942	644	663	75	1,383
Currency swaps	1,569	137	-	1,706	1,550	64	-	1,614
Forward foreign currency purchases	-	-	51	51	-	-	-	-
Liability derivative instruments	1,569	137	51	1,757	1,550	64	-	1,614
Net foreign currency position	-1,074	310	-51	-815	-906	599	75	-231

5.4.2.1.1 Nominal commitments of currency swaps with an underlying asset

No position held as at 31 December 2017 and 2016.

5.4.2.1.2 Nominal commitments of currency swaps with an underlying liability

The maturity schedule by foreign currency of the nominal commitments of the instruments subscribed is as follows:

31/12/2017	Тс	tal	Less tha	n 1 year	1 to 5	years	5 to 10) years	10 to 2	20 years		ars and eafter
_in millions	foreign currency	euros at the year- end exchang e rate										
Canadian dollar	277	184	-	-	-	-	-	-	277	184	-	-
Swiss franc	1,945	1,662	100	85	990	846	150	128	705	602	-	-
Pound sterling	3,605	4,063	-	-	800	902	-	-	1,501	1,692	1,304	1,469
Hong Kong dollar	937	100	-	-	-	-	937	100	-	-	-	-
Yen	55,066	408	-	-	32,000	237	13,000	96	-	-	10,066	75
US dollar	2,620	2,185	-	-	2,500	2,085	-	-	-	-	120	100
Australian dollar	90	59	-	-	-	-	90	59	-	-	-	-
Norwegian krone	500	51	-	-	-	-	-	-	500	51	-	-
Swedish krona	2,290	233	-	-	-	-	-	-	-	-	2,290	233
Foreign currency commitments received	-	8,943	-	85	-	4,069	-	383	-	2,529	-	1,877
Euro	-	9,969	-	70	-	4,278	-	402	-	3,023	-	2,196
Euro commitments given	-	9,969	-	70	-	4,278	-	402	-	3,023	-	2,196

31/12/2016	То	tal	Less tha	n 1 year	1 to 5	years	5 to 10) years	10 to 2	0 years		irs and eafter
in millions	foreign currency	euros at the year- end exchang e rate										
Canadian dollar	277	195	-	-	-	-	-	-	277	195	-	-
Swiss franc	1,945	1,811	-	-	1,090	1,015	150	140	575	535	130	121
Pound sterling	3,595	4,199	-	-	800	934	-	-	1,501	1,753	1,294	1,511
Hong Kong dollar	-	-	-	-	-	-	-	-	-	-	-	-
Yen	45,000	365	-	-	25,000	203	7,000	57	13,000	105	-	-
US dollar	1,220	1,157	100	95	1,000	949	-	-	-	-	120	114
Australian dollar	-	-	-	-	-	-	-	-	-	-	-	-
Norwegian krone	500	55	-	-	-	-	-	-	500	55	-	-
Swedish krona	-	-	-	-	-	-	-	-	-	-	-	-
Foreign currency commitments received	-	7,782	-	95	-	3,101	-	196	-	2,644	-	1,746
Euro	-	8,266	-	77	-	3,030	-	157	-	3,038	-	1,964
Euro commitments given	-	8,266	-	77	-	3,030	-	157	-	3,038	-	1,964

5.4.2.1.3 Interest flows of currency swaps

Based on year-end exchange and interest rates and future implicit rates of the year-end rate curve for floating rates, the maturity schedule is as follows:

	31/12/2017		31/12/2016		
In € millions	Interest received	Interest paid	Interest received	Interest paid	
Less than 1 year	313	-200	325	-211	
1 to 5 years	1,049	-780	1,202	-846	
5 to 10 years	977	-898	1,082	-963	
10 to 20 years	1,193	-1,039	1,394	-1,136	
20 years and thereafter	1,240	-1,223	1,333	-1,244	
Total	4,772	-4,139	5,338	-4,400	

5.4.2.2 Interest rate derivatives

SNCF Réseau operates in the interest rate swap and swaption market in order to manage its exposure to interest rate risk on borrowings. The fair value of these instruments in the balance sheet breaks down as follows by instrument and transaction type:

-	Balance	sheet fair value	as at 31/12/201	Balance sheet fair value as at 31/12/2016				
In € millions	Cash flow hedge	Fair value hedge	Trading	Total	Cash flow hedge	Fair value hedge	Trading	Total
Fixed-rate receiver swaps	1	78	14	92	1	95	18	114
Fixed-rate payer swaps	57	-	1	58	27	-	0	27
Asset derivative instruments	57	78	15	150	27	95	18	140
Fixed-rate receiver swaps	4	-	-	4	5	-	0	5
Fixed-rate payer swaps	534	-	18	552	646	-	22	668
Liability derivative instruments	539	-	18	556	651	-	22	673
Net foreign currency position	-482	78	-3	-406	-623	95	-5	-533

5.4.2.2.1 Nominal commitments of interest rate swaps

The maturity schedule, by type of instrument, of the nominal commitments is as follows:

	31/12/201	31/12/2017 Net debt				
	Net deb					
In € millions	Long-term	Short-term	Long-term	Short-term		
Fixed-rate receiver swaps	682	-	882	181		
Fixed-rate payer swaps	3,609	-	3,601	-		

5.4.2.2.2 Interest flows of interest rate swaps

Based on year-end exchange and interest rates and future implicit rates of the year-end rate curve for floating rates, the maturity schedule is as follows:

In € millions	Net interest flows as at 31/12/2017							
	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter			
Fixed-rate receiver swaps	-41	-166	-25	12	-			
Fixed-rate payer swaps	-39	-124	-136	-223	-52			
Total	-80	-289	-161	-211	-52			

		Net interest flows as at 31/12/2016								
In € millions	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter					
Fixed-rate receiver swaps	-10	-44	-3	15	-					
Fixed-rate payer swaps	-41	-146	-135	-265	-67					
Total	-51	-190	-138	-250	-67					

6 EMPLOYEE BENEFITS

6.1 DESCRIPTION OF EMPLOYEE BENEFITS

Under the law of 4 August 2014 covering the rail reform of 1 July 2015, the employees transferred from EPIC SNCF Mobilités were guaranteed the full earned rights to their employee benefits. The same plans therefore remain in effect within EPIC SNCF Réseau.

Since 1 January 2016, the benefits granted to the employees transferred from EPIC SNCF Mobilités have been gradually extended to the employees of the former Réseau Ferré de France (RFF). This alignment involving around 1,500 employees had no major impacts on the overall commitments.

6.1.1 Pension and similar plans

These benefits comprise end-of-career or termination benefits paid to contractual employees at retirement. In France, these benefits are determined in accordance with the national collective agreement or the company agreement in force. Paid at employment termination, they represent a post-employment benefit calculated on the last estimated end-of-career salary.

6.1.2 Provident plan

The provident plan concerns supplementary benefits for EPIC SNCF Réseau top executives not otherwise covered.

6.1.3 Social welfare initiatives

The SNCF Réseau Group implements various social welfare initiatives for personnel: access to infrastructures, consultation of social workers, etc. Both active (short-term benefits) and retired employees (post-employment benefits) may benefit from these initiatives.

A provision in the amount of benefit granted to retired employees was recognised.

6.1.4 Compensation for work-related injuries

Compensation for work-related injuries is self-financed for active and retired employees of EPIC SNCF Réseau, independently of the current general regime.

Life annuities are provided in full at the date of grant to injured employees without any seniority conditions. They represent long-term (active employees) and post-employment benefits (retired employees).

6.1.5 Gradual cessation of activity

The gradual cessation of activity is a procedure used to adjust the work time of employees who have reached the end of their careers. A work-time formula is thus arranged to provide a transition period between professional activity and retirement. The last agreement signed by EPIC SNCF Mobilités that came into effect in July 2008 offers the possibility of a gradual or complete cessation for the personnel of the 3 EPICs. The granting of benefits is based on a combination of criteria: years of service, hardship and employee category. The agreement is treated as a long-term benefit in the consolidated financial statements pursuant to IAS 19.

The calculation is mainly based on the assumption related to the expected proportion of employees to be covered by the procedure.

6.1.6 Long-service awards and other benefits

This heading combines the other long-term employee benefits granted by the Group, particularly bonuses with respect to long-term service awards (France).

6.1.7 Agreement on wage increases and buyback of quarters for former apprentices

On 28 October 2016, EPIC SNCF and all the trade union representatives signed a collective agreement negotiated for all the EPICs making up the public rail group. It covers wage increases relating to former apprentices and students and the set-up of a company financial contribution mechanism to buy back non-validated pension quarters of former apprentices, for apprenticeship periods prior to 30 June 2008.

As at 31 December 2017, this agreement covering wage increases and financial aid to buy back quarters from former apprentices resulted in the recognition of a provision for \notin 5.6 million.

6.1.8 Circulation privileges

EPIC SNCF Réseau personnel (active employees, retired employees and their beneficiaries) receive circulation privileges (CP) which enable them to travel under certain circumstances at prices that differ from the market. The Group considers that these travel privileges do not have a material impact on its production resources.

With respect to active personnel (over the period of activity), no liability is recognised since the CP are granted in consideration for services rendered by the beneficiaries over this period. They thus meet the definition of a short-term benefit.

For active employees over the post-employment period, current retirees and their beneficiaries, considering that the marginal average cost of this programme is lower than the average price paid on reservation, no liability is recorded in the financial statements regarding this post-employment benefit.

6.2 CHANGE IN THE NET POSITION OF THE PLANS

6.2.1 Breakdown of liabilities

The Group's main employee benefit plans gave rise to the recognition of the following liabilities:

In € millions	31/12/2017	31/12/2016
Pensions and other similar benefits	15	14
Provident obligations	17	16
Social welfare initiatives	98	93
Compensation for work-related injuries	482	468
Liabilities relating to post-employment	612	591
Compensation for work-related injuries	15	16
Long-service awards and other benefits	40	41
Gradual cessation of activity	175	185
Time savings account	82	73
Liabilities relating to other long-term benefits	311	316
Total liabilities	923	907
- of which non-current	865	847
- of which current	58	60

6.2.2 Change in liabilities

In € millions	31/12/2017	31/12/2016
Total liabilities at opening date	907	889
Current service cost	59	58
Past service cost	-	-1
Effect of plan settlements	-	-
Net financial interest	14	15
Actuarial gains and losses generated during the period Benefits paid to employees by the	18	4
company	-62	-59
Change in scope	0	-
Foreign exchange impact	-	-
Other	-12	_
Total liabilities at closing date	923	907

The 1.60% decrease in the discount rate to 1.23% as at 31 December 2017 generated an actuarial loss of €45 million that breaks down as follows: a financial expense of €12 million recognised under "Finance costs of employee benefits" with regard to long-term benefits and a negative impact of €32 million recorded in non-recyclable reserves under equity with regard to post-employment benefits. This actuarial loss was partially offset by a €9 million gain arising from experience adjustments following a decline in the number of beneficiaries for certain plans.

Changes in the present value of obligations, the fair value of plan assets and the net liabilities (assets) for 2017 are as follows:

€ millions	Pensions and other similar benefits	Provident obligations	Social welfare initiatives	Compensation for work- related injuries	Gradual cessation of activity and time savings account	Long- service awards and other benefits	31/12/2017
Present value of the obligation at opening date	14	16	93	484	258	41	907
Current service cost	2	0	2	15	33	7	59
Employee contribution	-						-
Past service cost arising from a plan amendment	-	-	-	-	-	-	-
Past service cost arising from a plan curtailment	-	-	-	_	-	-	-
Effect of settlements	-	-	-	-	-	-	-
Finance cost	0	0	1	8	4	0	14
Actuarial gains and losses generated during the period	-2	2	5	18	-5	0	18
Benefits paid to employees by the company Effect of changes in Group	-0	-1	-4	-27	-23	-8	-62
structure	0	-	-	-	-	-	0
Foreign exchange impact	-						-
Other	-0	-	-	-	-12	-1	-13
Present value of the obligation at closing date	15	17	98	497	257	40	923

unfunded obligations

untrunded obligations15179849725740923Changes in the present value of obligations, the fair value of plan assets and the net liabilities (assets) for 2016 are as follows:

In € millions	Pensions and other similar benefits	Provident obligations	Social welfare initiatives	Compensation for work- related injuries	Gradual cessation of activity and time savings account	Long- service awards and other benefits	31/12/2016
Present value of the obligation at opening date	18	16	96	480	248	30	889
Current service cost	2	0	2	17	28	9	58
Employee contribution	-	-	-	-	-	-	-
Past service cost arising from a plan amendment	-6	-	-	-	-	5	-1
Past service cost arising from a plan curtailment	-	-	-	-	-	-	-
Effect of settlements	-	-	-	-	-	-	-
Finance cost	0	0	2	8	4	0	15
Actuarial gains and losses generated during the period Benefits paid to employees by the	0	-1	-2	5	1	-1	4
company	-1	-1	-4	-27	-23	-3	-59
Effect of changes in Group structure	-	-	-	-	-	-	-
Foreign exchange impact	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Present value of the obligation at closing date	14	16	93	484	258	41	907
Of which present value of unfunded obligations	14	16	93	484	258	41	907

6.3 EMPLOYEE BENEFIT PLAN EXPENSES

For the basic plans and other defined-contribution plans, the Group expenses contributions payable when they are due. No provisions are recognised as the Group does not have any obligation beyond the contributions paid.

In the case of defined-benefit plans, when benefits are covered by third parties (insurance contracts, provident organisations unrelated to the Group), and the Group has no legal or implicit obligation to cover any losses relating to past services over the period or prior periods, no obligation is recognised and the insurance/provident premiums paid are recognised as payments to a defined contribution plan, the obligation to provide benefits to employees being the sole responsibility of the third party organisation. In the other cases, the obligations are subject to actuarial valuations and provisions are recorded on the balance sheet upon vesting of benefit rights by employees.

The actuarial liability (or present value of the obligation with respect to defined benefits) is determined according to the projected unit credit actuarial method, which stipulates that each period of service gives rise to an additional unit of benefit and measures each unit separately to determine the final obligation. These calculations include assumptions concerning the discount rate, mortality, employee turnover and expected future salary levels. In the case of plans partially or fully funded by plan assets, the net liability (asset) is recognised in the amount of the negative or positive difference between the present value of the obligation and the fair value of the plan assets.

Changes in the net obligation are recorded according to their nature.

The net charge is recognised:

- In current operating profit for the portion corresponding to service costs representing the straight-line vesting of benefits, past service costs (plan amendment and curtailment) and the impact of settlements. Past service costs are immediately recorded in profit or loss whether the rights are vested or not.

- In finance cost for the portion corresponding to the net financial interest (cost of the reverse discounting of the debt less the implicit return on plan assets, if any, and the interest on the asset ceiling impact) and the actuarial gains and losses generated by other long-term benefits.

6.3.1 Net expense with respect to defined benefit plans

The income statement expense for 2017 and 2016 breaks down as follows: 94 - SNCF RESEAU'S 2017 FINANCIAL REPORT

31/12/2017 In € millions	Pensions and other similar benefits	Provident obligations	Social welfare initiative s	Compensatio n for work- related injuries	Gradual cessation of activity and time savings account	Long- service awards and other benefits	TOTAL
Current service cost	2	0	2	15	33	7	59
Past service cost	0	0	0	0	0	0	0
Of which effect of plan amendments	0	0	0	0	0	0	0
Of which effect of plan curtailments	0	0	0	0	0	0	0
Effect of settlements on the obligation	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Gross profit	2	0	2	15	33	7	59
Net financial interest	0	0	1	8	4	0	14
Actuarial gains and losses generated during the year with respect to long- term benefits	0	0	0	0	-5	0	-5
Other	0	0	0	0	0	0	0
Finance cost	0	0	1	7	-1	1	9
Total	2	1	3	22	32	7	68

31/12/2016 In € millions	Pensions and other similar benefits	Provident obligations		Compensatio n for work- related injuries	Gradual cessation of activity and time savings account	Long- service awards and other benefits	TOTAL
Current service cost	2	0	2	17	28	9	58
Past service cost	-6	0	0	0	0	5	-1
Of which effect of plan amendments	-6	0	0	0	0	5	-1
Of which effect of plan curtailments	0	0	0	0	0	0	0
Effect of settlements on the obligation	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Gross profit	-4	0	2	17	28	14	58
Net financial interest	0	0	2	8	4	0	15
Actuarial gains and losses generated during the year with respect to long- term benefits	0	0	0	0	1	-1	0
Other	0	0	0	0	0	0	0
Finance cost	0	0	2	8	6	0	15
Total	-4	1	3	25	34	14	73

6.3.2 Net expense with respect to defined contribution plans

The expense recorded for defined contribution plans included in "Employee benefit expense" amounted to €0.6 billion in 2017 (€0.6 billion in 2016).

6.4 ACTUARIAL ASSUMPTIONS AND GAINS AND LOSSES

6.4.1 Main actuarial assumptions used

Provisions for employee obligations are calculated on an actuarial basis, using the projected unit credit method. The parameters used in the modelling of the main employee benefits are as follows:

Discount rate

Obligations relating to the main post-employment benefits were discounted at the closing dates market rate based on leading corporate bonds of comparable maturity. The benchmark used to determine the discount rate is Bloomberg AA for the Eurozone.

Mortality table

EPIC SNCF Réseau social welfare initiatives and provident obligations were measured using a prospective mortality table by gender specific to railway employees (special pension plan base). This table prepared by the Caisse de Prévoyance Retraite (provident pension fund) was validated by a certifying actuary.

A table including a degradation coefficient was extrapolated for compensation for work-related injuries/illnesses. Based on the certified table, the mortality tables of the other plans were also modified.

These mortality table changes satisfy the requirement of the revised standard according to which mortality assumptions must reflect that of the plan members both during and after employment.

Gradual cessation of activity plan membership

The amount of the obligation under the gradual cessation of activity agreement was calculated using a membership assumption rate of 31.89%. A 100 point increase or decrease in this assumption would have an impact of around €6 million on the obligation amount.

Assumptions used for the EPIC SNCF Réseau main plans

The main actuarial assumptions used for the measurement of the EPIC SNCF Réseau plans are described below:

	31/12/2017	31/12/2016
Discount rate	1.23%	1.60%
Inflation rate	1.75%	1.75%
Benefit remeasurement rate		
Benefit remeasurement rate	2.40%	2.40%
Provident obligations	1.75%	1.75%
Social welfare initiatives Compensation for work-	1.75%	1.75%
related injuries	2.37%	2.37%
Gradual cessation of activity	2.37%	2.37%
Mortality table		
	CPR M / CPR W	CPR M / CPR W
Mortality table	CPR AT	CPR AT
Provident obligations and social welfare initiatives Active and retired	CPR W	CPR W
employees with work-related injuries	CPR 80% M / CPR 20% W	CPR 80% M / CPR 20% W
Widows of employees with work-related injuries Gradual cessation of activity	CPR 80% M / CPR 20% W	CPR 80% M / CPR 20% W
Gradual cessation of activity plan membership	31.89%	31.89%

6.4.2 Analysis by nature of actuarial gains and losses

Actuarial gains and losses are recognised according to the plan's qualification:

- For defined benefit plans covering post-employment benefits, actuarial gains and losses are recognised in other comprehensive income under non-recyclable reserves. They are never recycled in profit or loss but can be reclassified in undistributed reserves if the entity concerned is removed from the consolidation scope.

- For other long-term defined benefit plans (long-service awards, unemployment, salary maintenance, gradual cessation of activity, etc.), actuarial gains and losses and any past service costs are immediately recognised in finance cost.

Change and breakdown of actuarial gains and losses

With respect to fiscal 2017, the impacts relating to changes in financial assumptions were mainly due to the 0.37 pt decline in the discount rate. Those relating to experience adjustments were primarily due to the decline in the number of beneficiaries

With respect to fiscal 2016, the impacts relating to changes in financial assumptions were mainly due to the 0.15 pt decline in the discount rate.

31/12/2017 In € millions	Pensions and other similar benefits	Provident obligations	Social welfare initiatives	Post- employment compensation for work- related injuries	TOTAL Post- employment benefits	Long-term compensation for work- related injuries	Gradual cessation of activity and time savings account	Long- service awards and other benefits	TOTAL Long- term benefits
Opening actuarial gains (losses)	1	1	-2	-19	-20				
Experience adjustments relating to liabilities Effects of	2	-1	1	7	9	1	17	0	17
changes in demographic assumptions relating to liabilities (1)	0	0	0	0	0	0	0	0	0
Effects of changes in financial assumptions relating to liabilities	-1	-1	-5	-25	-32	0	-12	0	-13
Actuarial gains and losses on the obligation generated over the year	2	-2	-5	-18	-22	0	5	0	5
Foreign exchange impact	0				0			0	0
Other	0	0	0	0	0	0	0	0	0
Closing actuarial gains (losses)	3	-1	-7	-37	-42				
Total experience adjustments	2	-1	1	7	9	1	17	0	17
Total impacts relating to changes in actuarial assumptions	0	-1	-5	-25	-32	0	-12	0	-13

31/12/2016 In € millions	Pensions and other similar benefits	Provident	Social welfare initiatives	Post- employment compensation for work- related injuries	TOTAL Post- employment benefits	Long-term compensation for work- related injuries	Gradual cessation of activity and time savings account	Long- service awards and other benefits	TOTAL Long- term benefits
Opening actuarial gains (losses)	1	0	-4	-13	-16				
Experience adjustments relating to liabilities Effects of	0	0	4	4	8	0	3	1	5
changes in demographic assumptions relating to liabilities (1)	0	0	0	0	0	0	0	0	0
Effects of changes in financial assumptions relating to liabilities	0	1	-2	-10	-12	0	-5	0	-5
Actuarial gains and losses on the obligation generated over the year	0	1	2	-6	-4	0	-1	1	0
Foreign exchange impact	0				0			0	0
Other	0	0	0	0	0	0	0	0	0
Closing actuarial gains (losses)	1	1	-2	-19	-20				0
Total experience adjustments	0	0	4	4	8	0	3	1	5
Total impacts relating to changes in actuarial assumptions	0	1	-2	-10	-12	0	-5	0	-5

Analysis of the obligation's sensitivity to the main actuarial assumptions

The amounts below correspond to the decrease (actuarial gain) or increase (actuarial loss) in obligations as recognised as at 31 December 2017.

31/12/2017 In € millions Actuarial (gains) losses	Pensions and other similar benefits	Provident obligations	Social welfare initiatives	Compensation for work- related injuries	Gradual cessation of activity and time savings account	Long- service awards and other benefits	TOTAL
Sensitivity to the discount rate							
Change of + 0.25 pt	0	-1	-4	-18	-7	-1	-30
Change of - 0.25 pt	0	1	4	19	8	1	32
Sensitivity to the inflation rate							
Change of + 0.25 pt	0	1	4	19		0	23
Change of - 0.25 pt	0	-1	-4	-18		0	-22
Sensitivity to Gradual cessation of activity membership rate	0	0	0	0	0	0	0
Change of + 1pt	0	0	0	0	6	0	6
Change of - 1pt	0	0	0	0	-6	0	-6

31/12/2016 In € millions Actuarial (gains) losses	Pensions and other similar benefits	Provident	Social welfare	Compensation for work- related injuries	Gradual cessation of activity and time savings account	Long- service awards and other benefits	TOTAL
Sensitivity to the discount rate	Denenta	obligations	milatives	injunes	account	Denenta	TOTAL
Change of + 0.25 pt	-1	-1	-3	-17	-7	-1	-29
Change of - 0.25 pt	-1	1	4	18	7	1	29
Sensitivity to the inflation rate							
Change of + 0.25 pt	0	1	4	18	0	0	22
Change of - 0.25 pt	0	-1	-3	-17	0	0	-21
Sensitivity to Gradual cessation of activity membership rate							
Change of + 1pt	0	0	0	0	6	0	6
Change of + 1pt	0	0	0	0	-6	0	-6
6.5 MANAGEMENT COMPENSATIO	N						

The Group's key management personnel are members of the SNCF Réseau Group Executive Committee. Their cumulative taxable compensation indicated below corresponds to short-term benefits.

	31/12/2017	31/12/2016	Change
Average number of managers	11	10	1
Gross taxable income in K€	3,059	3,115	-56
Net taxable income	2,552	2,617	-65
In-kind benefits in K€	38	29	9

The amounts shown correspond to gross compensation (in 2016 they corresponded to net compensation).

7 GROSS PROFIT

Gross profit is equal to revenue plus incidental income, net of expenses directly related to operating activities.

Revenue mainly comprises services carried out in the context of railway activities and is recognised at the date on which these services are rendered. Infrastructure fee revenue, which accounts for most of the company's revenue, is recognised in the accounts when the trains effectively run on the network. Timing differences between revenue recognition and the issue of invoices result in revenue adjustment entries.

Added to these infrastructure fees is the rate compensation paid by the French State to cover the marginal cost of freight traffic, together with the fees paid by freight companies. They are recognised in revenue as they are analysed as price supplements.

Other income mainly breaks down into study services, rental income and sales of materials.

Expenses directly related to operating activities include primarily purchases, subcontracting costs, other external services, employee costs, taxes and duties other than income tax, and other miscellaneous items. All charges to employee-related provisions and, specifically, charges relating to employee commitments (excluding the finance cost), are included in "Employee benefit expense."

Gross profit is separate from current operating profit, which includes the majority of non-cash items (depreciation and amortisation, provisions, impairment, etc.) and other miscellaneous items not directly attributable to another income statement account. Impairment and impairment reversals of operating assets are recognised below gross profit under "Net movement in provisions". In this case, the gross profit allocation is entered when the loss becomes effective.

Charges to provisions for liabilities and charges are also recognised under "Net movement in provisions," as are unused reversals. Used reversals are recognised with the expense they hedge within gross profit.

7.1 REVENUE

Revenue breaks down as follows:

In € millions	31/12/2017	31/12/2016	Change
Access fees	1,971	1,978	-7
Reservation fees	2,079	2,048	31
Traffic fees	1,378	1,350	28
Platform fees	122	121	0
Additional electrical traction usage and electricity transmission fees*	231	239	-8
Other proceeds	41	43	-2
Infrastructure fees	5,821	5,778	43
Freight compensation	62	78	-16
Other income	614	585	29
Revenue	6,496	6,441	55

* of which electricity transmission fee: €149 million

7.2 PURCHASES AND EXTERNAL CHARGES

Purchases and other external charges break down as follows:

In € millions	31/12/2017	31/12/2016	Change
Electricity transmission and traction means	-253	-333	80
Upkeep and maintenance	-582	-543	-39
Professional fees and IT services	-322	-289	-33
Property	-482	-463	-19
Other purchases and external charges	-450	-472	22
Purchases and external charges	-2,088	-2,100	12

* To ensure fiscal year comparability, reclassification in 2016 data of the expenses relating to utility contracts from the Property aggregate to the Other purchases and external charges aggregate.

Other purchases and external charges

Other purchases and external charges include the services invoiced by the Group. (See 9.1) $\,$

7.3 EMPLOYEE BENEFIT EXPENSE AND HEADCOUNT

Employee benefit expense mainly comprises wages, employee benefits and employee profit-sharing.

Employee benefit expense is reduced by the amount of Competitiveness and Employment Tax Credit (CICE) introduced by the amending finance act of 29 December 2012.

As at 31 December 2017, the employee benefit expenses and headcount break down as follows:

In € millions	31/12/2017	31/12/2016	Change
Wages and salaries	-2,302	-2,247	-55
Other employee benefits Seconded and temporary	2	1	2
employees	-16	-10	-6
Net employee benefit expense	-2,315	-2,256	-59
Average number of FTE employees	54,371	54,976	-605

7.4 TAXES AND DUTIES OTHER THAN INCOME TAX

Taxes and duties other than income tax are recognised when the obligating event occurs in accordance with IFRIC 21.

In € millions	31/12/2017	31/12/2016	Change
Territorial Economic Contribution	-86	-91	4
Property taxes	-26	-27	0
Salary-based taxes	-84	-90	6
Of which apprenticeship tax	-16	-14	-2
Of which vocational training	-17	-28	11
Of which construction levy	-10	-10	0
Of which transport payment	-35	-32	-3
of other taxes	-6	-7	1
Other taxes and duties (including C3S)	-14	-9	-5
Taxes and duties other than income	-211	-216	5

8 INCOME TAX EXPENSE

Income tax expense encompasses all taxes calculated on an accounting profit or loss net of income and expenses. The following items are recognized under this line item at the bottom of the income statement:

- Corporate income tax and the various additional contributions associated with it.
- Sponsorship and foreign tax credits.
- The impact of tax reassessments in respect of income tax
- Deferred tax

Deferred tax

The Group recognises deferred tax on all timing differences between the tax and book values of assets and liabilities in the consolidated balance sheet. Deferred tax is calculated using the liability method, applying the most recently voted tax rate at the year-end applicable to the period in which the timing differences are expected to reverse.

Deferred tax assets in respect of timing differences or tax losses carried forward, and tax credits, are recognised when recovery is deemed probable. Considering its life cycle, the Group considers a period of 25 years to be reasonable to determine the probability of recovering a deferred tax receivable.

Other income tax expense

Income tax expense other than deferred tax is offset against operating payables and receivables in the balance sheet. Deferred tax assets and liabilities are not discounted in accordance with IAS 12 and are offset in a separate line item under non-current assets and liabilities.

SNCF Réseau calculated a net deferred tax asset receivable of \notin 5.4 billion. Prior to the analysis of its recoverable portion, this amount comprised:

- loss carryforwards for €2.9 billion,
- temporary differences for €2.5 billion,
- IFRS restatements for €0.04 billion.

The amount takes into account the decrease in the tax rate from 28.92% to 25.83% according to the year in which the various receivable components will be settled. The deferred tax asset receivable was recognised for \notin 3.5 billion corresponding to the amount that can be recovered over the next 25 years, i.e. until 31/12/2042 inclusive for the receivable recorded as at 31/12/2017.

8.1 INCOME TAX EXPENSE ANALYSIS

In € millions	31/12/2017	31/12/2016	Change
Current tax (expense)/income	1	0	1
Deferred tax (expense)/income	-130	36	-167
Total	-129	37	-166

Since 1 January 2015, SNCF Réseau has belonged to the tax consolidation scope headed by SNCF. A tax consolidation agreement was signed by both entities to guarantee a neutral option for SNCF Réseau under this tax regime.

Deferred taxes were measured at a rate ranging between 34.43% and 25.82% according to the year in which they will be settled.

8.2 TAX PROOF

For its tax proof, the Group adopted the corporate income tax rate (33.33%) applicable in France, plus the 3.3% social security contribution, but without the 10.7% exceptional contribution. This exceptional contribution applies to businesses whose revenue exceeds \notin 250 million during fiscal years up to 30 December 2016.

In € millions	31/12/2017	31/12/2016
Net profit/(loss) for the year	-201	-120
Share of net profit/(loss) of companies consolidated under the equity method Net profit/(loss) from discontinued	1	1
operations, net of tax	100	27
Corporate income tax Net profit/(loss) before tax from ordinary activities and before the share of net profit of companies consolidated under the equity method	-129 -73	37 - 157
Income tax rate applicable in France	34.43%	34.43%
Theoretical income tax (expense)/income	25	54
Permanent differences	-120	-126
Tax bases not utilised	-73	77
Impacts of changes in tax rates - Liability method	-403	-434
Capitalisation of prior year losses	330	511
Other	-	-
Corporate income tax	N/A	N/A

The Competitiveness and Employment Tax Credit (CICE), which was set up to finance and improve the competitiveness of French companies and came into effect from 1 January 2013, had a €38 million positive impact on the tax proof heading "Tax credit."

9 RELATED PARTY TRANSACTIONS

SNCF Réseau, as an industrial and commercial public institution wholly owned by the French State (via the French Government Shareholding Agency), is related, in the meaning of IAS 24, Related Party Disclosures, to all companies and entities controlled by the French State.

Disclosures on individually or collectively material transactions with these entities concern the following related parties:

- The EPICs belonging to the Public Rail Group, SNCF Mobilités and SNCF,
- The French State.

Transactions between SNCF Réseau Group and other State companies (EDF, La Poste, etc.) are all performed on an arm's length basis.

No Group companies other than the parent company carry out material transactions with these related parties.

9.1 RELATIONS WITH THE PUBLIC RAIL GROUP

9.1.1 Relations with SNCF Mobilités

SNCF Mobilités is currently one of SNCF Réseau's main customers in terms of French rail network infrastructure fees.

Balance sheet headings

In € millions	31/12/2017	31/12/2016
Operating receivables	712	759
Operating liabilities	782	726

* Balance sheet headings excluding borrowings presented separately in balance sheet liabilities (see Note 5.2.2.)

Income and expenses

In € millions	31/12/2017	31/12/2016
Infrastructure fees	3,568	3,502
Operating expenses	-565	-513

9.1.2 Relations with SNCF

SNCF is responsible for the strategic control of the Public Rail Group as well as the shared functions carried out for all the Group EPICs, with regard to the Group's coordination, support and shared service centre departments. These shared functions include:

- Administrative management of human resources, payroll and social security protection;
- Management of the Group's information systems;
- Management of the Group's real estate and property;
- Organisation of the Group's general purchases.

Balance sheet headings

In € millions	31/12/2017	31/12/2016
Operating receivables	80	35
Operating liabilities	62	63

Income and expenses

In € millions	31/12/201 7	31/12/2016
Operating income	74	66
Operating expenses	-503	-489

9.2 RELATIONS WITH THE FRENCH STATE

Pursuant to the legislation applicable to companies whose sole shareholder is the French State, SNCF Réseau is subject to the economic and financial supervision of the French State, the French Court of Auditors, the French Parliament, as well as the verifications of the French General Inspectorate of Finance.

SNCF Réseau invoices the French State for the access fees related to TER regional passenger trains on behalf of regions, and Trains d'Équilibre de Territoire (TET).

The French State also pays out freight compensation grants and investment project financing grants to SNCF Réseau.

The government aid granted to the SNCF Réseau Group by the French State is presented in the following table:

Balance sheet headings

In € millions	31/12/2017	31/12/2016
Claimed grants to be collected	409	559

Income and expenses

In € millions	31/12/2017	31/12/2016
Access fees*	1,820	1,831
Freight compensation	62	78

*of which TER fees: €1,384 million and TET fees: €435 million

9.3 COMPENSATION OF KEY EXECUTIVES

In € millions	31/12/2017	31/12/2016
Short-term employee benefits	3	3
Post-employment benefits	0	0
Termination benefits	0	0
Compensation of key executives	3	3

The amounts shown correspond to gross compensation (in 2016 they corresponded to net compensation).

10 OFF-BALANCE SHEET COMMITMENTS

			31/12/	2017						
Commitments given	Change Openin	Opening	pening Closing	Amount of commitments per period						
In € millions				< 1 year	1 to 5 years	> 5 years				
Commitments relating to financing	-	-	-	-	-	-				
Commitments relating to operations	-687	2,037	1,350	235	336	779				
Investment purchase commitments: other non- current assets	5	65	70	39	30	0				
Investment purchase commitments: PPPs and concession/Eole project	-602	808	206	51	139	15.38				
Sales undertakings - property	41	17	58	28	30	-				
Operating leases: equipment	7	37	44	24	20	0.194				
Real estate operating leases	-20	207	187	77	105	5				
Financial guarantees given to third parties	-3	764	760	0	3	757				
Operating lease - rail equipment	-114	139	25	16	9	-				
Total commitments given	-687	2,037	1,350	235	336	779				

			31/12/2	31/12/2017					
Commitments received	Change	Opening	Closing	Amount of commitments per period					
In € millions				< 1 year	1 to 5 years	> 5 years			
Commitments relating to financing	250	1,250	1,500	-	1,500	-			
Unused bank credit line	250	1,250	1,500	-	1,500	-			
Commitments relating to operations	-400	940	541	201	312	27			
Investment purchase commitments: other non- current assets	-423	423	0	0	-	-			
Sales undertakings - property	41	17	58	28	30	-			
Real estate operating leases	-6	8	2	2	0	-			
Financial guarantees received from third parties	-13	493	480	171	282	27			
Total commitments received	-150	2,190	2,041	201	1,812	27			

10.1 COMMITMENTS RELATING TO FINANCING

SNCF Réseau has a syndicated credit facility that was set up on 29 June 2017 and expires on 29 June 2022. It may be extended for 1 year and renewed twice. This credit facility was

10.2 ASSET PURCHASE COMMITMENTS

• PPP and concession agreements

As at 31 December 2017, there were no longer any PPP commitments following the commissioning of all projects.

• Charles de Gaulle Express Project

The Law of 28 December 2016 on the ratification of the CDG Express line assigned a work concession to a company, majority owned by SNCF Réseau and the ADP Group (with a possible third party minority investment). The company will be responsible for the design, financing, production or development, operation and maintenance, including upkeep and renewal, of the railway infrastructure. The law also enabled the French State to designate, via a call for tenders, the rail operator in charge of passenger transport.

The French State passed an amendment in order to specify that the golden rule does not apply to SNCF Réseau's contribution to the financing of CDG Express given its specific status. The financial arrangement for this concession is currently being finalised. not drawn down as at 31 December 2017. This undrawn credit facility was concluded with 15 banks.

• Eole project

An interprefectoral decree of 31 March 2016 authorised the work and operation for the westerly extension of the RER E from Haussmann St Lazare station to Nanterre – La Folie.

All the financiers have now approved the framework financing agreement, with the exception of the Hauts de Seine General Council.

The agreement approves the project's overall financing plan totalling ξ 3.4 billion, of which ξ 256 million in SNCF Réseau equity. The work carried out under SNCF Réseau project ownership amounts to ξ 3 billion. Commissioning will take place between 2022 and 2024.

As decided by the French State, SNCF Réseau has guaranteed a cash advance (repayable) capped at 40% of all the expenditure incurred at each stage, i.e. a maximum amount of \notin 805 million. This advance, granted over a period of 10 years, bears interest at 1.5%.

10.3 TRACK RESERVATION COMMITMENTS

The Document de Référence du Réseau for 2017, which can be consulted at the SNCF Réseau website, provides for a new reciprocal compensation mechanism should track allocations or reservations be cancelled or significantly modified by either party.

The applicable penalties will now range between €0.5/tr/km and €8/tr/km according to variable terms between the cancellation or modification date and the track reservation date. They are more significant for SNCF Réseau than for the railway undertakings.

The amounts to be reported in off-balance sheet commitments must reflect the objective reality of the transactions that could impact the company's accounts in the future.

In this case, in the absence of a history and sufficient perspective to reliably measure the impacts arising from this

11 STATUTORY AUDITORS' FEES

Pursuant to Article 222-8 of the general regulations of the Autorité des marchés financiers (AMF - French Financial Markets Authority), the table below presents the fees paid by SNCF Réseau, its wholly-consolidated subsidiaries and joint operations to each of the statutory auditors responsible for auditing the SNCF Réseau Group company and consolidated financial statements.

new mechanism, no amount has been reported in off-balance sheet commitments given or received with respect to these penalties in the accounts for the year ended 31 December 2017.

10.4 FINANCIAL GUARANTEES GIVEN TO THIRD PARTIES

Financial guarantees given to third parties as at 31 December 2017 primarily comprised the guarantee issued in 2011 by RFF for the Caisse des Dépôts-Savings Account fund management.

- Financial guarantees received mainly comprise financial guarantees obtained from Eiffage Rail Express, OCVIA and VINCI Construction.

SNCF Réseau's principal statutory auditors have been PwC and Ernst & Young for fiscal years starting on or after 1 January 2015.

The following table shows the breakdown of fees by audit firm:

	Ernst & Young			PwC		
In € millions	31/12/2017	31/12/2016	31/12/2017	31/12/2016	5	
Statutory audit (consolidated and individual)	C	.3	0.3	0.3	0.3	
Services other than account certification	С	.0	0.2	0.1	0.3	
Total	0	.3	0.5	0.4	0.6	

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French GAAP – In € millions



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1 SNCF RÉSEAU IN 2017

1.1 PRESENTATION OF THE ACTIVITY

SNCF Réseau manages, maintains, develops and markets the services offered by the French National Rail Network. It manages safety and performance for nearly 30,000 km of rail lines, of which 2,600 high-speed lines. It also manages

customer access to the network and service infrastructures under transparent and non-discriminatory conditions: 28 railway undertakings run on the Network and 10 other companies, known as candidates (combined transport operators, ports, etc.), order train paths which they then assign to the rail company of their choice.

SNCF Réseau is organised according to 4 business lines and an Ile-de-France Executive Management Department:

SNCF RÉSEAU

MAINTENANCE & WORKS	TRAFFIC	ENGINEERING & PROJECTS	NETWORK ACCESS
Network maintenance, operational security	Rail traffic management	Delegated project ownership, project management and site logistics engineering services, in France and abroad	Network access management in accordance with the key functions

Ile-de-France Executive Management combines the four business lines under the authority of a General Director in order to respond to the specificities of this high-density rail zone.

There are also ten regional departments that are directly attached to the Chairman. Within their respective regions, they oversee the company's institutional representation in dealing with local partners, and particularly the transport organising authorities, under the management of Deputy General Directors.

SNCF Réseau acts as the intermediary between the transport Organising Authorities and the French State for all the regional and national rail network development projects that it undertakes and leads.

In addition, its subsidiaries are involved in the following activities:

- SFERIS, a company that carries out project works in France and provides expertise, 100% owned by SNCF Réseau;
- EURAILSCOUT BV, an on-board track inspection and analysis company, 50% owned by SNCF Réseau;
- CDG Express Etudes, a rail link project in France, between Paris-Est station and Paris-Charles-de-Gaulle Airport, consolidated pursuant to the rules applicable to "Joint Operations" (IFRS 11);
- Altametris, a company created on 7 March 2017, specialising in the collection, processing and optimisation of data using automated mobile devices, 100% owned by SNCF Réseau.

1.2 CORPORATE STRATEGY

At the end of September, the Chairman Patrick Jeantet announced his plans to define a new strategy to build tomorrow's leading rail system in keeping with the priority given to daily transport: "we want more trains." Based on a dual approach to transform the company, it aims to improve service quality, secure engineering works, provide SNCF Réseau with a more pivotal role in rail system operations and satisfy the expectations of both customers and employees.

Pending this new strategy, the primary commitments remain as follows:

- strengthen the fundamentals of industrial and social excellence;

- initiate a transformation to support the industrial and economic performance;
- and develop cooperation within SNCF Réseau, the public Group and stakeholders.

1.3 HIGHLIGHTS

1.3.1 Signing of the multi-year performance contract

On 18 April 2017, the SNCF Réseau Board of directors approved the signing of the multi-year performance contract with the French State. This contract, which provides for investments amounting to ξ 46 billion over ten years, was then signed with the French State on 20 April 2017.

This contract introduces a new visibility over the company's investments, resulting in network upgrades and renewals to maintain a high level of safety and service quality.

Under the multi-year contract, SNCF Réseau pledges to roll out and fulfil a performance plan with the following targets:

- €0.5 billion in productivity for investments and operating expenses by the end of 2021;
- €1.2 billion in productivity for investments and operating expenses by the end of 2026;

The gradually deployed plan focuses on the following performance levers:

- Productivity gain driven by higher renewal volume and the implementation of industrial efficiency levers (technological innovation, process reengineering, project value analysis, extension of night work shifts);
- Reinvesting of productivity gains in network maintenance;
- Reduction in maintenance costs as from 2021, as a result of network renewal investments;
- Optimisation of commercial expenses (constant improvement in service quality).
- Reduction in general and administrative costs.

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1.3.2 Golden rule

Decree 2017-443 of 30 March 2017, specifying SNCF Réseau's investment financing rules, was published in the *Journal Officiel* of 31 March 2017.

The "Golden rule" ratio is defined as the ratio of net debt (period-end repayment amount) to IFRS gross profit for the period.

SNCF Réseau may no longer finance development investment when this ratio exceeds 18.

The ratio is calculated yearly when the annual consolidated financial statements are approved by the Board of directors.

Based on the 2016 annual accounts, the SNCF Réseau Board of directors' meeting of 18 April 2017 noted that the ratio was 22.24, thus exceeding the threshold of 18. As at 31 December 2017, the ratio had increased slightly to 23.85 as the improvement in gross profit (+ \notin 29 million) did not offset the rise in the net debt repayment amount (+ \notin 3,236 million).

1.3.3 Transformation of SNCF Réseau

SNCF Réseau faces six challenges:

- Overhaul first and foremost the network with the most traffic in keeping with its long-term industrial asset management strategy
- Boost the capacity and solidity of saturated or potentially saturated lines and hubs;
- Speed up the modernisation of operating and signalling systems for greater efficiency and capacity;
- Improve safety;
- Roll out a **commercial policy** that promotes the use of the rail network;
- Assist the company's **employees** with these new challenges so that they may feature among the world's top rail experts.

1.3.4 Creation of the ALTAMETRIS subsidiary

On 7 March 2017, SNCF Réseau created Altametris, a subsidiary dedicated to drone solutions.

SNCF Réseau has been acquiring the expertise necessary to develop IT solutions for maintenance and safety drones for the past 10 years, working closely with researchers, manufacturers, start-ups and the *Direction Générale de l'Aviation Civile* (DGAC or French Directorate General of Civil Aviation). SNCF has been a member of the *Conseil pour les Drones Civils* (French Council for Civil Drones) since its creation.

Altametris offers services to SNCF group's various business lines as well as other infrastructure managers:

- Data collection by automated mobile devices such as drones and robots;
- 3D plans and models, necessary for any infrastructure modernisation or renewal project;
- Infrastructure monitoring through the identification of components and their condition and changes over time, with a specialisation in industrial and line infrastructures;
- Decision-making support; aerial data from a variety of sources (photography, infra-red, laser, etc.) offers

an original view of events, facilitating decision-making.

1.4 FINANCIAL KEY FIGURES

In € millions	2017	2016
Revenue	6,466	6,397
Gross profit	1,748	1,696
Operating profit/(loss)	957	884
Finance cost	-1,426	-1,442
Net profit/(loss) from ordinary activities before tax	-469	-559
Exceptional profit/(loss)	68	59

1.5 PRESENT VALUE OF ASSETS AT THE YEAR-END

The year-end impairment test on the Infrastructure CGU assets, carried out as at 31 December 2015, had led to an impairment loss of \notin 9.6 billion. At this year-end, the discussions with the French State prior to the signing of the multi-year performance contract stipulated by the law of 4 August 2014 had enabled management to build a financial trajectory for SNCF Réseau, taking into account the key changes and assumptions discussed and decided with the French State. On 9 March 2015, this financial trajectory was approved by the SNCF Réseau Board of directors, which considered that it represented the best business forecast for the next 15 years.

As part of the 31 December 2016 closing, the finalisation of the performance contract with the French State and its validation by the SNCF Réseau Board of directors on 20 December 2016 had represented an indication of a change in value. A new test was therefore carried out. The final version of the performance contract had led to the inclusion of additional productivity assumptions for expenses, the downward revision of platform fee assumptions, and the upward revision of compliance, renewal and industrial investment assumptions. The new test confirmed the network's economic value and served to move the test preparation method towards a more standard methodology, in line with the new context of the performance contract.

As part of the 31 December 2017 closing, changes in taxation (removal of the CICE and gradual decrease in the income tax rate) and the changes in employer and employee contributions announced in the French Finance Acts and the French Social Security Financing Law for 2018 represented indications of impairment and a new test was therefore carried out using the same methodology as the test performed on 31 December 2016.

2 2017 RESULTS

2.1 GENERAL OBSERVATIONS ON 2017 GROUP RESULTS

	31 December 2017	31 December 2016	
Revenue	6,466	6,397	
Own production and change in inventories and WIP	4,429	3,861	
Purchases and external charges	-5,492	-4,886	
Added value	5,402	5,372	
Other operating income (including operating grants)	148	112	
Taxes and duties other than income tax	-214	-221	
Employee benefit expense	-3,588	-3,567	
Gross profit	1,748	1,696	
Reversal of impairment, operating provisions and investment grants; Expense reclassifications	1,134	995	
Depreciation, amortisation, impairment and operating provisions	-1,925	-1,806	
Other management expenses	-1	-1	
Operating profit/(loss)	957	884	
Financial income	584	483	
Financial expenses	-2,010	-1,925	
Finance cost	-1,426	-1,442	
Net profit/(loss) from ordinary activities before tax	-469	-559	
Exceptional income	464	682	
Exceptional expenses	-396	-623	
Exceptional profit/(loss)	68	59	
Corporate income tax	106	87	
Net profit/(loss) for the year	-295	-413	

2.1.1 Revenue

	31 December 2017	31 December 2016	Change
Access fees	1,971	1,978	-7
Reservation fees	2,079	2,048	31
Traffic fees	1,378	1,350	28
Platform fees	122	121	0
Additional electrical traction fees	231	239	-8
Other proceeds	-	-	-
Sub-total infrastructure sale proceeds	5,780	5,735	44
Other income	686	661	25
Total revenue	6,466	6,397	69

Revenue increased by +€69 million compared to 31 December 2016.

Infrastructure fees (nearly 90% of revenue) rose by +€44 million. Adjusted for the negative repercussions of strikes and the impact of the 2016 leap year (+€61 million), fees declined by -€17 million, mainly due to the traffic mix effect.

2.1.2 Own production

	31 December 2017	31 December 2016	Change
Own production - Purchases and external charges	3,166	2,598	569
Own production - Employee benefit expense	1,177	1,154	23
Change in inventories and work-in-progress	85	109	-24
Total Own production	4,429	3,861	568

2.1.3 Other operating income

	31 December 2017	31 December 2016	Change
Operating grants	132	105	27
Other income	16	7	9
Total Other operating income	148	112	37

2.1.4 Purchases and external charges

2.1.4.1 Breakdown of purchases and external charges

	31 December 2017	31 December 2016	Change
Transmission and traction means	-281	-336	55
Upkeep and maintenance	-2,236	-1,877	-359
Professional fees and IT services	-706	-551	-155
Property	-742	-657	-85
Other purchases and external charges	-1,528	-1,465	-64
Total	-5,492	-4,886	-607

2.1.4.2 Other purchases and external charges

Following the implementation of the reform on 1 July 2015, assets were produced internally within SNCF Réseau, resulting in the expensing of purchases and external charges and a corresponding entry in own production.

2.1.5 Employee benefit expense

	31 December 2017	31 December 2016	Change
Wages and salaries	-2,315	-2,283	-32
Pension contributions	-664	-640	-24
Other social security contributions	-507	-581	74
Expenses relating to vacation, leave and early departures	-31	-16	-15
Sub-total	-3,516	-3,520	3
Seconded personnel	-72	-47	-25
Total employee benefit expense	-3,588	-3,567	-21
Total average number of paid employees	57,692	57,744	-52

The average number of full-time equivalent employees as at 31/12/2017 was 57,692 FTE.

2.1.6 Finance cost

	31 December 2017	31 December 2016	Change
Net borrowing costs	-1,480	-1,408	-72
Net finance cost of employee benefits	-31	-19	-13
Dividends	0	0	0
Other financial expenses	-27	-28	1
Other financial income	113	12	100
Total finance cost	-1,426	-1,442	17

2.1.7 Exceptional profit/(loss)

The 2017 net exceptional profit of €68 million primarily comprised net proceeds from asset disposals in the amount of €74 million.

3 INVESTMENTS

In € millions	2017	2016	Chan	ge
Major development projects	1,212	1,205	7	1%
Of which PPP share	675	957	-282	-29%
Regional development projects	818	546	272	50%
Network compliance upgrade	246	246	0	0%
Renewal and performance	2,668	2,785	-117	-4%
Property and third party	129	126	3	3%
TOTAL RAIL INVESTMENTS	5,075	4,908	167	3%
Industrial	303	335	-32	-10%
TOTAL EXPENDITURE	5,378	5,244	134	3%

Investments are presented as total expenditure, capitalised and non-capitalised, less finance costs.

Total investment expenditure represented €5,378 million, up by €134 million compared to 2016 (€5,244 million). This increase breaks down into the production phase of the Eole project for +€315 million, the ramp-up of regional development projects for +€272 million, the continuation of renewal activities for -€42 million, excluding the GSM-R commissioning in March 2016 for -€74 million, and the decline in expenses incurred in development projects under PPPs for -€282 million.

The network's renovation and modernisation (in a bid to combat ageing infrastructures) confirmed in the performance contract between the French State and SNCF Réseau is continuing at a steady pace.

- Renewal and performance investments

The 2017 renewal programme demonstrates the company's determination to continue investing to upgrade the primary network with the greatest traffic volume.

These programmes, of which around 61% focus on track renewal, are in keeping with fiscal 2016, while taking into account a policy tailored to Ile-de-France (28% of investments) supported by the deployment of "Dense Zone" all-in-one track removal units. In 2017, operations continued to be rolled out, in particular the renovation of track and points and crossings for the primary network (Vigirail plan), the renovation of signalling equipment and the deployment of Network Operations Centralised Commands to pool together several switching stations. Catenaries and telecommunication facilities are still being renovated, particularly via the roll-out of fiber optics.

Network compliance upgrade

These investments are undertaken to satisfy the legal and regulatory requirements placed on the infrastructure manager, primarily for collective socio-economic reasons. Network compliance upgrade falls

within the priority given by the company to specific safety and accessibility operations. 2017 production is consistent with 2016.

- Network development

Network development investments include investments in major national projects and regional projects.

Network investment and development expenses increased by +€279 million compared to 2016, primarily due to new major high-speed line projects, the ramp-up of the Eole project in Ile-de-France and other regional projects.

- Major projects under PPPs

The new South Europe Atlantic SEA (Tours / Bordeaux 302 km) and Brittany-Loire BPL (Le Mans / Rennes 182 km) high-speed lines came into service on 2 July 2017. The Nîmes – Montpellier bypass (80 km) came into service in December 2017 for freight traffic. It should come into service in July 2018 for passenger traffic; Montpellier Sud station should be completed at the same time.

Major pre-work projects

The studies relating to future major projects were ranked in order of importance based on the priorities established by the Mobilité 21 Commission. They will be reviewed by the Infrastructure Guidance Board (Conseil d'Orientation des Infrastructures) set up in connection with the Assises de la Mobilité conference. The decisions made by the French State will determine the launch and progress of these real estate studies/acquisitions.

Major projects in progress

This category mainly comprises the Eole project for ${\notin}469$ million in 2017.

- Regional development projects

These projects mainly involve State-Region contracts from 2015 to 2020, including the modernisation of UIC lines 7 to 9 and capillary freight investments, with a ramp-up in 2017.

4 NET BORROWINGS AND FINANCING

SNCF Réseau raises funds on international capital markets in order to cover its long-term financing needs, mainly through bond issues and private placements and, to a lesser extent, borrowings from banks and/or local authorities.

The IFRS net debt repayment amount (excluding PPP, accrued interest receivable, collateral and closing rate remeasurement) totalled €45 billion, compared to €42 billion as at 31 December 2016, i.e. an increase of €3 billion, comprising:

- Long-term resources raised by SNCF on government bond markets in 2017 representing a total repayment amount of €4.9 billion,
- Bond repayments in euros and dollars for ${\in}1.4$ billion,
- Financial receivable relating to piggy-backing under the Eole agreement for €0.2 billion.

For its internal financing and cash management, SNCF Réseau uses both national and international short-term financing and investment instruments such as Treasury bills and Commercial Paper.

	31 December 2017	31 December 2016	Change
Long-term debt	46,129	43,544	2,585
Outstanding principal:	45,477	42,914	2,563
Long-term	44,923	42,458	2,465
Of which exchange difference	-1,026	-	-1,026
Of which inflation	254	227	26
RIF loans	34	37	-3
Zero coupon	521	419	102
Accrued interest:	652	630	22
SNCF debt	691	697	-6
Outstanding principal:	670	676	-6
Transferred debt (historical price)	666	671	-5
RIF loans	4	4	-0
EIB credit line renewal	-	-	-
Accrued interest	21	21	-0
Guarantee deposits received	5	4	0
Short-term debt	1,620	1,599	21
exchange difference	-60	-	-60
Margin calls (Liabilities)	64	34	30
Bank overdrafts	23	58	-35
PPP payable	2,221	2,067	154
Total borrowings	50,753	48,004	2,749
- Cash at bank and in hand – marketable securities (1)	-3,329	-3,233	-96
- PPP receivable	-2,227	-2,067	-160
- Margin calls (Assets)	-1,084	-	-1,084
- Other financial assets (2)	-309	-12	-297
Net debt as a carrying amount	43,804	42,692	1,112
- Accrued interest receivable	-673	-651	-22
- Margin calls (Liabilities)	1,019	-34	1,054
- PPP payable and receivable	6	-	6
- exchange difference	1,086	-	1,086
Net debt repayment amount	45,243	42,007	3,236

(1) including the SFERIS current account advance (2) including the SFERIS loan

The BPL, CNM and GSMR borrowings relate to the Brittany-Loire, Nîmes-Montpellier Bypass and Global System for Mobile communication for Railways PPPs. They represent SNCF Réseau's debt to its partners that are pre-financing part of the projects. Since 2017, SNCF Réseau has repaid the BPL and CNM debts.

Claims were received by the company from 2015 to 2017 for the CNM and BPL PPPs for €634 million. These claims were mostly challenged by the company and only the accepted portion was recognised.

4.1 MARKET RISK MANAGEMENT

- Interest rate risk management

As part of its financial strategy and to limit its exposure to an increase in its financial expenses, SNCF Réseau has defined principles in order to minimise its exposure to interest rate risk.

The current historically low interest rates and the desire to maintain long-term economic equilibrium led the SNCF Réseau Board of directors to opt for a breakdown of the net debt repayment amount that was 90% fixed-rate, 6% floating-rate and 4% inflation-indexed. A limited margin around each of these thresholds is authorised by the Board of directors.

Middle Office/Control verifies that this breakdown is maintained on a daily basis. To achieve this breakdown, SNCF Réseau may use option-based derivatives or interest rate swaps for hedging purposes.

- Management of currency risk

 SNCF Réseau negotiates foreign currency financing, which is translated into euros.

Counterparty risk management

SNCF Réseau is exposed to counterparty risk in connection with its cash investments and the subscription of derivatives from its financial partners, insofar as the debtor refuses to honour all or part of its commitment or does not have the means to respect it.

To manage and limit this risk, investment instruments and derivatives are only entered into with financial institutions corresponding to the credit rating and equity criteria validated by the SNCF Réseau Board of directors.

A limited commitment amount by institution is determined according to these criteria.

Middle Office/Control monitors that the authorised limit by counterparty is observed on a daily basis.

To hedge counterparty risk, SNCF Réseau performs margin calls with its financial counterparties. Collateral (in cash only) is called up in the amount of the market value of the financial instrument portfolios for each counterparty with whom SNCF Réseau is at risk.

The sums thus received by SNCF Réseau amounted to €64 million at the end of 2017, compared to €34 million at the end of 2016.

5 COMPANY ECONOMIC ACTIVITY

5.1 BUSINESS ACTIVITY: IMPROVE NETWORK ACCESS

Improving the service in respect of customers (railway undertakings and authorised candidates) is a major challenge for ensuring the continuity of the French rail transport system. It is rooted above all in the quality of responses to train path orders and then passed on to traffic management processes.

This service quality approach is accompanied by the setting of objectives and the measurement of the degree of customer satisfaction. The results of the 2017 survey were shared with all customers.

Existing incentives for both the infrastructure manager and train path applicants were renewed in 2017:

- The **reciprocal incentive scheme**, established in 2015, sanctions railway undertakings and/or the infrastructure manager for any modification or cancellation of confirmed train path-days based on confirmed train path-days allocated in the service timetable. It was renewed in 2017 in a more industrialised manner covering the entire service schedule;
- the **Performance Improvement System**, an incentive measure that sanctions the infrastructure manager (IM) and/or railway undertakings (RU) responsible for irregularities resulting in traffic delays (penalties are based on the number of minutes lost per 100 km);

INDICATORS	2017	2016	2015
Number of minutes lost per 100 km by RC:			
- for IM reasons (min)	1.37	1.39	1.29
- for RC reasons (min)	2.13	2.09	2.05
Capital expenditure to improve reliability (€ million)	36	44	26

- the **framework agreements** under which the infrastructure manager undertakes to allocate a commercial capacity, defined upstream, to a customer that agrees to order it, with a system of penalties based on the reservation fee in the event of default;
- the **train path quality agreements (TPQA)** under which the infrastructure manager undertakes to eliminate uncertainty within a defined timeframe on a pre-determined list of train paths.

As the owner of platforms and platform accesses (walkways, underground passages, stairs, etc.), SNCF Réseau is responsible for providing access to trains from public spaces and its pricing in nearly 3,000 stations and stopping points on the French national rail network. As part of the service quality improvement initiative, investments continue to improve accessibility for people with reduced mobility. SNCF Réseau's scope in railway stations represents an investment of over €300 million per year and annual operating expenses of more than €70 million (cleaning, maintenance of lifts and escalators, everyday maintenance of platforms and shelters, snow removal, etc.). In return, it generates platform fees of around €120 million for more than 40 million train departures, i.e. an average of €3 per train departure.

- Accessibility for persons with reduced mobility

By Order 2014-1090 of 26 September 2014, SNCF Réseau is committed to drafting a national master plan (SDNA) and 20 regional accessibility master plans (SDRA). This accessibility

agenda is planned until 2025 for an estimated budget of just over ${\ensuremath{\in}} 2.7$ billion.

Out of the 720 stations and stops identified in the SDNA and SDRA, 562 railway stopping points have yet to be made accessible. A total of 22 were completed in 2015 and 44 in 2016.

The programme continued in 2017 with the ramp-up of studies initiated following the gradual signing of financing agreements, and projects coming to completion.

INDICATORS	2017	2016	2015
Number of stopping points made accessible at national level	34	44	39
Capital expenditure to improve accessibility	01		
(€ million)	142	132	131

Lastly, at the request of the French Minister of Transport, to ensure transparency on the maintenance operations carried out on the French national rail network, SNCF Réseau makes weekly updates to an interactive map on its website that gives information to railway undertakings as well as travellers on the work and maintenance operations scheduled on each line for the following week.

INDICATORS	2017	2016	2015
Traffic in train.km (M T.km)	476	470.8	497.8
Freight traffic from railway undertakings other than Fret SNCF			
(%)***	52	49	44
Passenger traffic from railway undertakings* other than SNCF (%)***	4.8	5.2	4.6
Satisfaction rating for railway undertaking customers (out of 10)**	5.5	n.a.	5.5
Generic window consumption rate (%)	88.8	84.9	85.5

*Including the Thalys and Eurostar subsidiaries

Biennial satisfaction survey *2015 and 2016 data in T km – 2017 data based on infrastructure fees

5.2 NETWORK OPERATIONS: SAFETY AND RELIABILITY CHALLENGES

Railway safety remains SNCF Réseau's top priority and it is extremely vigilant when it comes to handling safety incidents. Under the PRISME programme - launched in 2015 - which aims to attain safety excellence and make the company an international reference, SNCF Réseau rolled out a vast managerial support and investment policy. During the year, over 1,000 safety managers were trained in analysing local risks so as to boost risk prevention, mainly by training operators. This change in managerial methods included new tools designed to better train operators or enable them to roll out procedures more effectively among line staff.

Considering the ramp-up in engineering work and the increase in the number of incidents (catenary breakages, signalling disruptions, etc.) since the start of the year, particularly in Ilede-France, network performance is difficult to maintain, as demonstrated by the Performance Improvement System IM indicator, which overall remained stable at 1.37 min/100km for the 2017 service timetable compared to 1.38 for the 2016 service timetable, below the annual target. The Performance Improvement System IM punctuality indicator represents the number of minutes lost by all Railway Undertakings (RU) due to the Infrastructure Manager (IM) in relation to 100 km covered by these RU*. To improve rail system punctuality, SNCF Réseau set up a punctuality management modernisation programme based on operating excellence methods and the new "Reliability observation" tool. These new methods and tools were rolled out across the entire network in the second half of 2017.

At the same time, SNCF Réseau has pursued its ambitious Operational Traffic Management Modernisation project. It should improve punctuality for all railway undertakings, major incident management, passenger and shipper information, thereby benefiting all railway sector stakeholders.

*It includes external causes (malicious acts, suicides, most adverse weather and strikes)

5.3 NETWORK MAINTENANCE: SAFETY AND INNOVATION

Besides the climate, labour, local and general events which disrupted 2017 production, network maintenance was overall sustained thanks to the constant availability of teams. However, it was carried out in a context of ageing facilities, despite substantial renewal measures, mainly focusing on the section with the most traffic on the network. A substantial amount of maintenance work was accordingly performed in 2017, with efforts increasing in certain fields and geographical areas.

The measures undertaken in 2017, that will continue in 2018, focused more specifically on:

- the carbon footprint of network renewal and development projects;
- tightened maintenance operations, in line the importance placed on safety within the company;
- the continued deployment of automated surveillance and supervision, with more and more inspections using measuring and recording devices instead of inspections on foot. This is one of the objectives set out in the Performance Contract;
- ongoing enhancement of vegetation management operations, and the roll-out of actions plans in forthcoming years in a future context where certain currently used products will be banned.

Maintenance production is generally performed with varying observations depending on the different techniques; for sizeable operations, the situation is as follows:

- on tracks, 14,526 rail sections were replaced, a slightly lower volume than in 2016. This is partly due to the implementation of head wash repair (HWR), which prevented defects that would have led to the replacement of rail sections; furthermore, the number of tightened maintenance operations on B families of line crossings in response to the accident at Brétigny reached its maximum threshold;
- in the field of signalling, compliance with intervention times for the preventive maintenance of facilities improved significantly, and work continued on signal bungalows scheduled in the wake of the Denguin accident (summer of 2014). More than half of bungalows were protected against rodents at the end of 2017;
- clearing operations remained at a high level, mainly within the outsourcing policy, with mechanical means now given precedence over chemical means.

The roll-out of a Lean management optimisation approach, as well as innovations, particularly in IT tools and technical processes, contribute to maintaining a stable performance in the primary network. Examples are numerous:

- the development and deployment of computerassisted maintenance management software (CMMS) is continuing according to a specific schedule;
- machinery designed to automate and modernise network supervision is now being used across the primary network, mainly on UIC lines 1 to 4 under the SURVEILLE plan (inspections using machinery to replace inspections by foot), resulting in 2017 in scheduled inspection work by machinery on 97,760 km of tracks, making up for a substantial reduction in inspection visits carried out on foot; For 2018, the track distance will increase to 97,900 km;
- digital transformation continues within maintenance activities: in 2015, operators and supervisors responsible for network surveillance and maintenance received 13,700 tablets et phablets and were gradually offered new applications designed to improve the input, analysis and traceability of their maintenance operations. Their development will continue and be extended in 2018. In addition, around 10,000 extra phablets and tablets will be supplied in 2018 to all users of the new applications deployed in the SPOT and OSMOZE CMMS projects.

5.4 PROPERTY AND REAL ESTATE ACTIVITY

Disposals and participation in the national housing policy

SNCF Réseau carried out 296 disposals for a total of 240 hectares that will be used to develop around 3,492 housing units.

The main transaction in 2017 involved the sale of land and a space to the Société du Grand Paris in Bécon-les-Bruyères.

In terms of outlook, the Gobelins sites and part of the Invalides train station were selected for an innovative urban call for projects called "Reinvent Paris 2", and 3 sites were chosen for the "Reinvent the Greater Paris region" project: Argenteuil, les Ardoines and Pleyel. The advent of the 2024 Olympic Games has speeded up the urban redevelopment in Northern Paris where SNCF Réseau has several sites (Hébert, Dubois, Gare des Mines) registered under the agreement signed with the city of Paris in 2016. At the same time, discussions on the construction of a future hospital in St Ouen are ongoing. Finally, two new real estate agreements were signed in 2017 involving Greater Lyon and Reims.

INDICATORS	2017	2016	2015
Surface areas transferred during the year			
(hectares)	240	1,474	107
of which surface areas transferred for the			
construction of housing (hectares)	218	23	15
Number of housing units built	3,492	2,132	950
of which number of social housing units built	1,362	1,099	600

- Streamlining of tertiary sites

On 13 October, SNCF Réseau signed a new lease for a 29,000 $\rm m^2$ site in St Denis that will house the Réseau IIe-de-France teams and the SNCF Réseau IT department.

- Contribution to the growth of real estate transactions

On 7 September 2017, the SNCF Réseau Board of directors decided that SNCF Réseau would create a real estate holding company whose main purpose would be to invest in companies that would develop and promote the properties and equipment sold by the public rail group.

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Network refurbishment support

SNCF Réseau is revamping its training facilities; the first step was completed in 2017 with the construction of new buildings in Nanterre. The Greater Paris maintenance and works teams which represent 40% of staff did not have their own premises. Training at this site may reach 58,000 intern days in 2021 and prepare employees for renewal work on the Greater Paris network for the next 10 years. Developments similar to these new buildings are to be scheduled for other major regional cities.

In July 2017, SNCF Réseau commissioned a new workshop covering nearly 5,000 m^2 for the assembly of switches and crossings and their delivery by trestle wagons. This operation launched in 2015 is part of the planned industrialisation of switches and crossings in order to carry out 550 renewals per year over the next 10 to 15 years, in accordance with the Major Network Modernisation Plan.

Development of unused lines

SNCF Réseau owns approximately 8,000 km of linear infrastructures, where traffic is absent and which will not be reopened in the short or mid term. These assets are developed via tourist rail operations or greenways under temporary occupancy or management transfer agreements.

Several agreements were signed in 2017, mainly with the City of Paris or the RATP involving the Paris Little Belt Railway, or with regional authorities for the creation of greenways.

INDICATORS	2017	2016	2015
Share of kilometres for lines closed that were			
subject to right-of-way protection (%)	80	76	74

*2015 and 2016 figures updated following additional data

6 FINANCIAL RELATIONS WITH THE FRENCH STATE

6.1 PUBLIC FUNDING RELATED TO NETWORK INVESTMENTS

With regard to its network investments and project studies, SNCF Réseau receives co-financing from public and private partners: the Agence de financement des infrastructures de transport de France or other government authorities.

The grants obtained by SNCF Réseau as at 31 December 2017 totalled €1,762 million, of which €302 million from the AFITF. Grant receivables due decreased to €1,799 million at the end of 2017 (of which €370 million from the French State and AFITF), compared to €985 million at the end of 2016 (of which €468 million from the French State and AFITF), but the portion exceeding six months decreased by €344 million.

6.2 TAXATION

The direct business activity of SNCF Réseau is solely carried out on French soil and, with the exception of technical assignments, it has no direct presence or investment project on its own account in a country other than France. SNCF Réseau is not present in any non-cooperative states and territories.

6.3 RECLASSIFICATION OF A PORTION OF THE SNCF RÉSEAU DEBT

As part of the reorganisation of government debt as defined by the Maastricht Treaty, a portion of SNCF Réseau's debt was recorded by INSEE as government debt totalling €10.9 billion in 2014. This reclassification did not lead to a change in the SNCF Réseau financial statements. SNCF Réseau also remains responsible for the operating management of the debt, without any change in former practices

7 EMPLOYEE MATTERS

For further information on "employee matters," see the sncf réseau consolidated financial statements.

8 INFORMATION ON SUPPLIER PAYMENT DEADLINES

As at 31 December 2017, amounts payable to suppliers totalled €2,731 million, reconciled as follows with the figures shown in the financial statements:

In € millions	2017	2016	Change
Trade payables and related accounts shown in balance sheet liabilities	678.1	706.4	-28.3
Purchase invoice accruals included under this heading	2,036.3	2,000.2	36.1
Contract warranties and penalties included under this heading	16.8	17.5	-0.7
Total	2,731.2	2,724.1	7.1

Breakdown of trade payables and related accounts totalling €678 million by maturity:

	0 days (not past due)	1 to 30 days	31 to 60 days	61 to 90 days		91 days or more	Total (1 day and more)
(A) Payment delay slots*							
Total number of invoices	46,968						5,097
Amount of asset invoices including tax (€ millions)	-45	-4	(C	0	0	-4
Amount of operating invoices including tax (€ millions)	-600	-17	-	3	-1	-7	-28
Total amount of invoices including tax (€ millions)	-646	-20	-:	3	-1	-8	-32
Percentage of total purchase invoices including tax	-9.4%	-0.3%	0.0%	6 0.	0%	-0.1%	-0.5%
(B) Invoices excluded from (A) relating to c	lisputed or unre	corded debts					
Number of outstanding invoices excluded			943 r	not recorded			
Total amount of outstanding invoices excluded including tax				2			
(C) Benchmark settlement periods used (co	ontractual or leg	ial period)					
Legal periods	60 days from invoice issue date by default						
Contractual periods	Certain contracts may provide for: 30 days from the invoice issue date, 45 days from the month-end and payment upfront						

The late payments relate to disputed invoices. These disputes are being discussed in an attempt to settle them.

9 CHALLENGES AND OUTLOOK

SNCF Réseau is guided by a long-term vision and has drafted a new strategy for 2030. Safety, the company's intangible value, will be reinforced in the long term by the ongoing management programme PRISME. Efforts have continued to reduce major safety incidents, simplify structures and roll out digital technology. The digital transformation of the maintenance business line is based on the deployment of CMMS and new digitised surveillance and monitoring techniques.

In addition to the measures specific to the H00 programme for robustness, and the FIRST programme for passenger information that were designed in 2017 and will be implemented in 2018, production performance continues to be driven by decisive initiatives: overhaul of punctuality management, successful roll-out of an expert network (railway line managers and managers of regional operations) serving the general production system, development of "Performance observatory" use cases, etc.

Traffic management productivity and efficiency were boosted by the ongoing Network Operations Centralised Commands programme with major operations: Paris-Aulnay-Roissy-Mitry (phase 3 in 2018), Bourgogne Sud phase 2 (November 2018), and Rennes sud (March 2018). The Operational Traffic Management Modernisation programme will also contribute to the traffic management efficiency target as from 2019 on the Paris-Marseille line, its priority deployment.

The ongoing and heightened renewal efforts in accordance with the French State – SNCF Réseau performance contract will sustain the section with the most traffic on the primary network by strengthening industrial partnerships to further innovation, develop new methods and build an ecosystem in the interests of railway transport.

Finally, the National Conference of Territories and the Assises de la Mobilité conference should prepare the mobility law in the first half of 2018. Chaired by the former chairman of the AFITF, Philippe Duron, the new Infrastructure Guidance Board will carry on this work after the national mobility conference. It brings together MPs, experts and specialists for a more efficient sorting of major infrastructure projects according to the actual resources of the AFITF. At the same time, the Spinetta report puts forward an overall strategy to overhaul the rail transport model in a market that is now open to competition, while preserving the mandates of an efficient public service.

The year 2018 will be marked by a major transformation in SNCF Réseau with the presentation of the 2030 strategy and the ensuing reorganisation in order to meet these challenges.

10 RISKS AND THEIR MANAGEMENT

For further information on "Risks and their management" see the Integrated Report to the SNCF Réseau Consolidated Financial Statements.

11 CORPORATE SOCIAL RESPONSIBILITY

For further information on "Corporate social responsibility," see the SNCF Réseau Consolidated Financial Statements.

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French GAAP In € millions

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BALANCE SHEET

ASSETS			31 December 2017	31 December 2016	
	Note	Gross	Depreciation, amortisation and impairment	Net	Net
Intangible assets	4.1	1,712	-482	1,230	1,202
Property, plant and equipment	4.2	76,984	-32,047	44,937	37,335
Intangible assets in the course of	4.1	141	0	141	103
Property, plant and equipment in the course of construction	4.2	12,116	-35	12,081	16,160
PP&E in the course of construction made available to the concession-holder	4.2	0	0	-	190
Long-term investments	4.3	3,611	0	3,610	2,120
Total non-current assets		94,564	-32,564	61,999	57,110
Inventories and work-in-progress	4.4	637	-114	524	487
Payments on account for inventories	4.5	106	-	106	297
Trade receivables and related accounts	4.5	1,343	-56	1,286	1,295
Other receivables	4.5	3,277	-88	3,189	3,288
Marketable securities	4.7	2,281	-	2,281	2,403
Cash at bank and in hand	4.7	1,086	-	1,086	816
Prepaid expenses (a)		36	-	36	38
Total current assets		8,766	-258	8,508	8,624
Prepayments and deferred charges	4.8	1,334	-290	1,044	718
Unrealised foreign exchange losses	4.9	2,033	-	2,033	227
Total assets		106,696	-33,112	73,584	66,680

EQUITY AND LIABILITIES	Note	31 December 2017	31 December 2016
Share capital	4.10	9,765	9,765
Accumulated deficit	4.10	-24,755	-24,341
Net profit/(loss) for the year	4.10	-295	-413
Investment grants	4.11	25,312	23,851
Equity		10,027	8,861
Provisions for liabilities	4.12	395	495
Provisions for charges	4.12	1,093	1,081
Provisions		1,487	1,575
Convertible bonds	4.13	-	-
Other bonds	4.13	46,394	43,165
Bank borrowings (b)	4.13	427	425
Miscellaneous borrowings	4.13	3,932	4,414
Borrowings		50,753	48,004
Payments received on account for orders		261	277
Trade payables and related accounts	4.14	2,731	2,724
Tax and employee-related payables	4.14	1,076	1,062
Other operating payables	4.14	2,069	2,062
Deferred income		760	778
Other accruals and deferred income	4.16	2,640	1,336
Other payables		9,538	8,239
Unrealised foreign exchange gains	4.17	1,779	-
Total equity & liabilities		73,584	66,680

INCOME STATEMENT

	Note	31 December 2017	31 December 2016
Revenue	5.1	6,466	6,397
Own production and change in inventories and WIP	5.2	4,429	3,861
Purchases and external charges	5.4	-5,492	-4,886
Added value		5,402	5,372
Other operating income (including operating grants)	5.3	148	112
Taxes and duties other than income tax	5.5	-214	-221
Employee benefit expense	5.6	-3,588	-3,567
Gross profit		1,748	1,696
Reversal of impairment, operating provisions and investment grants; Expense reclassifications	5.8	1,134	995
Depreciation, amortisation, impairment and operating provisions	5.8	-1,925	-1,806
Other management expenses		-1	-1
Operating profit/(loss)		957	884
Financial income	5.9	584	483
Financial expenses	5.9	-2010	-1,925
Finance cost		-1,426	-1,442
Net profit/(loss) from ordinary activities before tax		-469	-559
Exceptional income	5.10	464	682
Exceptional expenses	5.10	-396	-623
Exceptional profit/(loss)		68	59
Corporate income tax	6	106	87
Net profit/(loss) for the year		-295	-413

The financial statements are presented in millions of euros.

SNCF Réseau's financial statements were approved on 22/02/2018 by the Board of directors.

SNCF Réseau is the consolidating entity of the SNCF Réseau Group. The SNCF Réseau consolidated financial statements can be consulted at the following website <u>www.sncf-reseau.fr</u>.

The SNCF Réseau Group is itself consolidated by EPIC SNCF, which heads the public rail group, in accordance with rail reform law of 4 August 2014. The SNCF Réseau consolidated financial statements can be consulted at the following website www.sncf-reseau.fr.



1 MAJOR EVENTS

1.1 FRENCH STATE / SNCF RÉSEAU AGREEMENT

1.1.1 Multi-year performance contract

On 20 April 2017, SNCF Réseau signed the 2017-2026 performance contract with the French State.

Under this contract, the rail network management policy and the rail infrastructure development strategy defined by the French State will be implemented.

It provides for primary network investments of €34 billion over 10 years:

- €27.9 billion for renewal,
- €4.5 billion for compliance upgrade,
- €1.8 billion in industrial investments, with nearly €300 million per year from 2017 to 2019 to ensure future productivity.

The plan also earmarks €12 billion for regional lines and rail hubs as part of State-Region Contracts.

The contract also provides for the payment of allocations by SNCF to SNCF Réseau of €170 million starting in 2017 and up to €603 million in 2026.

The allocation of €170 million to the French State support fund that was confirmed by SNCF at its Supervisory Board meeting of 27 April 2017 was paid in August 2017.

In the multi-year contract, SNCF Réseau has undertaken to roll out a performance plan to achieve productivity of \notin 453 million by 2021 and \notin 1.2 billion in 2026. Performance will be driven by industrial efficiency and the decline in maintenance volume (following the network renewal in 2021).

1.1.2 Golden rule

The purpose of this rule is to control SNCF Réseau debt by setting a ratio threshold of 18 (Net Debt/Gross Profit), beyond which SNCF Réseau can no longer contribute to investment financing, which must then be covered by the requesting party (French State, regional authorities, etc.). Based on the 2017 annual accounts, the SNCF Réseau Board of directors' meeting of 22 February 2018 noted that the ratio was 23.85, thus exceeding the threshold of 18.

Decree 2017-443 of 30 March 2017 was published in the *Journal Officiel* of 31 March 2017.

1.2 RAIL SYSTEM FINANCING

1.2.1 New Green Bond issue

After its successful initial Green Bond issue in October 2016, SNCF Réseau continued its programme with two new benchmark public issues:

- €1 billion, maturing in 17 years, at a rate of 1.92% in March 2017,
- €750 million, maturing in 30.4 years, at a rate of 2.31% in July.

1.2.2 Switch to bilateral derivative hedging contracts

Pursuant to the authorisation obtained at the 30 November 2016 Board of directors' meeting, hedging contracts were adjusted to set up bilateral margin calls (no longer unilateral).

This adjustment enables SNCF Réseau to conclude hedging instruments (interest rate, currency) under more favourable financial terms and conditions. An initial cash collateral deposit of €916 million was granted to financial institutions in respect of the hedging financial instruments subscribed by SNCF Réseau. According to market changes, this cash position may increase or decrease.

2 SUBSEQUENT EVENTS

ARAFER opinion 2018-004 of 22 January 2018

On 22 January 2018, ARAFER adopted an opinion on fees relating to the regulated services provided by SNCF Réseau in passenger stations for the 2018 service timetable. The issued opinion was favourable and had no impact on the Group's financial statements.

3 ACCOUNTING PRINCIPLES AND METHODS

SNCF Réseau is a State-owned industrial and commercial institution (EPIC), subject to the financial management and accounting rules applicable to industrial and commercial companies. It keeps its accounting books and records in accordance with the general chart of accounts published in ANC regulation 2014-03, as amended by ANC regulation 2016-07.

Change in accounting method:

The coming into force of ANC regulation 2015-05 on the recognition of forward financial instruments and hedging transactions had no impact on profit or loss but had an impact on the balance sheet presentation. SNCF Réseau now recognises its foreign currency borrowings at the closing rate, and records the foreign exchange gains and losses in the balance sheet. Insofar as foreign exchange hedges set up by SNCF Réseau are perfect, no foreign exchange loss provision was recorded for unrealized foreign exchange losses.

Previously, foreign currency borrowings were recorded directly at the hedged rate.

The impacts of this change are presented below:

	31/12/2017 prior to the adoption of ANC regulation 2015-05	31/12/2017 after the adoption of ANC regulation 2015-05
Long-term debt	47,173	46,147
Short-term debt	1,680	1,620
Unrealised foreign exchange losses		-345
Unrealised foreign exchange gains		1,431

	31/12/2017 prior to the adoption of ANC regulation 2015-05	31/12/2017 after the adoption of ANC regulation 2015-05
Remeasurement of hedging swaps		1,026
Remeasurement of forward purchases		60
Market value of cash instruments in isolated open positions		3
Provisions for unrealised losses on derivatives in isolated open positions	3	3
Valuation difference Hedging swaps and forward purchases (assets)		-1,434
Valuation difference Hedging swaps and forward purchases (liabilities)		345

Regarding 2016 comparative items, the adoption of the new ANC regulation 2015-05 as at 31/12/2016 would have the following impacts on the various balance sheet headings, compared to the published financial statements:

- Bonds: decrease of €484 million
- Short-term debt: increase of €62 million
- Unrealised foreign exchange gains: increase of €1,105 million

- Unrealised foreign exchange losses: decrease of €683 million
- Derivative valuation difference (liabilities): increase of €683 million
- Derivative valuation difference (assets): decrease of €1,109 million

The company did not adopt any other changes in accounting method compared to the previous year.

3.1 PROPERTY, PLANT AND EQUIPMENT

Pursuant to Article 5 of Decree 97-445 of 5 May 1997 and Article 11 of the corresponding law governing its initial property holdings, SNCF Réseau was granted full ownership of the French national rail network and other land and buildings that it may either develop or sell subject to compliance with the rules governing public land.

3.1.1 Property, plant and equipment in the course of construction

<u>General principle</u>

Property, plant and equipment is stated at acquisition cost. This cost includes the purchase price and incidental expenses, i.e. all directly attributable costs incurred in bringing the asset to the location and condition necessary for its intended use.

Property, plant and equipment produced internally is stated at their production cost. The cost capitalisation period begins on the date on which management has made the decision, based on technical and financial plans, to produce the asset and demonstrated that it will generate future economic benefits -French Chart of Accounts 321-11. In practice, the production cost of projects is capitalised in the balance sheet as from the so-called "pre-project" phase. The cost capitalisation period ends when the projected level of use has been reached. The recognition point for the accounting of commissioned railway assets is the date of the report on the delivery of the structures to the maintainer; otherwise, the commercial commissioning date can be used.

For projects carried out directly, production cost includes the cost of studies, construction work, purchase cost and compensation paid for land acquisitions as well as capitalisable overheads.

The production cost of work carried out under Public-Private-Partnerships (PPP) or concession arrangements is recognised in line with the economic progress of work based on the percentage completion communicated by the partners or concession holder.

Interest on borrowings, incurred when acquiring or producing property, plant and equipment, is not capitalised in the purchase or production cost.

Impairment of projects in progress

Two types of provision are calculated:

- the fixed-percentage provision: capitalised costs for work-in-progress are 25%, 55% or 100% provided for where the investments have been discontinued for 2, 3 or 4 or more years, respectively.
- The exception provision: a triggering event may call the completion of a project into question. If the risk of non-completion is greater than 50%, a 100% provision is raised.

Impairment is calculated net of earned grants related to the corresponding projects.

When the cancellation of a project is confirmed, the corresponding costs are transferred to expenses. Where necessary, the corresponding grants are transferred to income

3.1.2 Property, plant and equipment commissioned

Property, plant and equipment categories

The rail network PP&E classification includes 11 families comprising approximately 100 components. In addition, tracks are classified based on International Union of Railways (UIC) line traffic indicators.

Depreciation of property, plant and equipment

Rail network property, plant and equipment are depreciated on a straight-line basis. Depreciation periods are based on the lives of the various components that were defined in accordance with the recommendations of technical experts in each relevant field, or, in short, by family:

Land	Not
	depreciated
Improvements to land	20 to 30 years
Buildings	15 to 50 years
Improvements to buildings	10 years
Earthworks	10 years
Tracks	20 to 100
	years
Electricity supply equipment	10 to 75 years
Signalling	15 to 50 years
Telecommunications	5 to 30 years
Level crossings	15 years
Engineering works	30 to 70 years

Operating property, plant and equipment is depreciated on a straight-line basis over the following useful lives:

Trains	30 years
Improvements to buildings owned by third parties	10 to 15 years
Machinery and equipment	5 to 20 years
Furniture and office equipment	5 to 7 years
IT and telecommunications	3 to 5 years
Cars	5 years

Impairment of commissioned property, plant and equipment:

In the case of SNCF Réseau, it is not possible to estimate the recoverable amounts of stand-alone assets. Consequently, SNCF Réseau uses the concept of the cash-generating unit (CGU) as defined by IFRS (IAS 36).

A CGU being the smallest identifiable group of assets which generates independent cash inflows, SNCF Réseau has identified two CGUs: an "Infrastructure" CGU and a "Property" CGU.

At each balance sheet date, the company assesses whether there is an indication that a CGU's assets have lost/regained value. Where there is such an indication, an impairment test is performed.

Scope of CGU assets

The Infrastructure CGU comprises assets used in SNCF Réseau's infrastructure management activities, that is land and buildings dedicated to these activities, and all infrastructure equipment. These assets belong to the families of the accounting classification.

The Property CGU comprises assets not used by SNCF Réseau in its infrastructure management activities. These include land and buildings regarded as ultimately saleable, some of which may be occupied by third parties under tenancy agreements. They generate cash in and outflows that can be distinguished from those generated by SNCF Réseau's other assets, using allocation criteria.

Indications of loss in value/reversal

For the Infrastructure CGU, SNCF Réseau has adopted as an indication of loss in value/reversal a major permanent or long-term change in the following indicators:

- change in the business model or performance contract with the French State;
- definition of a new trajectory for maintenance and renewal expenditure;
- major change in the network pricing system;
- major change in the company's financing model or significant projects;
- labour reform within the company;
- obsolescence or physical deterioration of assets that was not foreseen in the depreciation schedule;
- material change in the extent or manner in which the asset is used;
- change in market interest rates.

For the Property CGU, indication of a loss in value is assessed based on forecast realisation values for the assets in question, taken from the business plan.

Impairment valuation

The impairment test involves comparing the reference net carrying amount of assets within the CGU scope with their recoverable amount. If the net carrying amount exceeds the value in use, an impairment loss is recognised for the difference. This impairment is allocated to each of the assets comprising the CGU, in proportion to their NCA.

Once calculated and allocated, the impairment is reversed as and when the relevant assets are depreciated/amortised.

If the test leads to a NCA for the CGU that is lower than the recoverable amount and impairment has previously been recognised, this impairment is reversed to the extent of the recoverable amount.

The reference net carrying amount corresponds to the net carrying amount of the assets in service, less the corresponding investment grants, plus the renewal asset outstanding, less the corresponding ongoing grants, and plus WCR. The recoverable amount of the assets of the Infrastructure CGU consists of their value in use (there is no net selling price for these assets), i.e. the present value of estimated future cash flows expected from the continuous use of these assets and their exit at the end of their useful life.

The selected discount rate is determined based on the structure using the cost of resources and the risks faced by other regulated infrastructure managers comparable to SNCF Réseau.

3.1.3 DISPOSALS

The net proceeds from disposals correspond to the difference between the sale price and the net carrying amount of the asset as well as any costs of releasing the lands sold.

3.2 INTANGIBLE ASSETS

Intangible assets, mainly comprising software and industrial processes, are amortised on a straight-line basis over their estimated useful life, i.e. generally less than five years. Development costs are capitalised when it is probable that future economic benefits will flow to the entity and the cost for the entity can be reliably measured.

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3.3 LONG-TERM INVESTMENTS

Equity investments and other long-term investments are stated in the balance sheet at purchase cost, net of any impairment.

An impairment loss is recognised once the net carrying amount exceeds the fair value.

The fair value of investments corresponds to the value in use for the company. This value is determined either using the market value for listed companies (stock market price), or according to the share of net worth held and a dataset comprising:

- historical items used to assess the initial value of the investments;
- current items such as the company's profitability or the present value of the underlying assets;
- future items corresponding to forecast profitability or achievement and trends;
- economic climate.

The assessment of the value of the investments takes into account the business' maturity (if the business is in a launch phase, no impairment is recorded if future profitability is secured).

3.4 GRANTS

SNCF Réseau receives grants under financing agreements for investment projects concluded with third parties (French State, Local authorities, Regions, etc.).

They are included in

- operating income when they relate to operating expenses (general studies, preliminary studies),
- equity when they relate to capitalised expenditure. These grants are then released to profit or loss to match the depreciation recognised on the commissioned property, plant and equipment. For non-depreciable land, SNCF Réseau reverses investment grants in equal amounts over a ten-year period.

At each balance sheet date, and for each project, grants claims are reconciled with the amount of expenditure recognised. Adjustments are then made and recorded either in assets under "Grants not yet claimed" or in the "Grants" line item of current liabilities for grants "claimed in advance." These adjustments then make it possible to record the "earned grant".

The payment provisions for these grants differ according to the investment project and the payer's identity. They are paid according to a schedule included in the financing agreement or according to work progress.

"Earned grants" relating to PPP arrangements are recognised in the same manner according to the percentage completion of work, to mirror the recognition of production in progress.

3.5 INVENTORIES

Inventories are stated at the lower of cost price and net realisable value. Cost price is equal to acquisition or production cost. Production cost comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Inventories are measured using the weighted average cost method.

Inventories are written down based on the age, turnover and economic useful life of items.

3.6 OPERATING RECEIVABLES

Receivables are stated at their nominal amount.

An impairment loss is recorded once it is likely that the receivables will not be recovered (unsuccessful reminders, collective proceedings). This impairment loss is determined based on an individual appraisal of non-recovery risk.

3.7 MARKETABLE AND SIMILAR SECURITIES

Marketable securities are stated in the balance sheet at the lower of their purchase cost or market value.

Bonds are recognised at their acquisition date at the nominal amount adjusted for the premium or discount. At the year-end, they include the amount of accrued interest receivable.

Shares in UCITS are recognised at purchase cost excluding registration fees.

At the year-end, they are compared with the net asset value. Should the purchase cost exceed the net asset value, an impairment loss is recorded.

Negotiable debt securities are recognised at purchase cost. Interest is recorded in financial income on a time-apportioned basis.

3.8 TRANSACTIONS IN FOREIGN CURRENCIES AND PROVISIONS FOR FOREIGN EXCHANGE LOSSES.

At the balance sheet date, differences between the euro equivalent amount originally recognised and the euro equivalent amount arising from retranslation at the year-end rate are recorded under assets (unrealised foreign exchange losses) and liabilities (unrealised foreign exchange gains). A provision is recorded for any unrealised foreign exchange losses.

3.9 PROVISIONS FOR LIABILITIES AND CHARGES

3.9.1 Recognition principles

Provisions are recorded when, at the balance sheet date, the company has a present obligation to a third party as a result of a past event and the settlement of this obligation will require an outflow of company resources with no consideration.

This obligation may be legal, regulatory or contractual. It may also result from company practice or external commitments that create valid expectations in third parties that the company will assume certain responsibilities.

The estimated amount of the provision reflects the outflow of resources that is likely to be necessary to settle the company's obligation. If a reliable estimate of this amount cannot be made, no provision is recorded. Disclosure is provided in the notes to the financial statements.

Provisions are discounted when the impact of the time value of money is deemed material. The discount rate is determined with reference to a closing market rate based on leading corporate bonds with a maturity comparable to the estimated maturity of the provision.

A contingent liability is a possible obligation that arises from past events whose existence will only be confirmed by the occurrence of uncertain future events not wholly within the control of the company, or a probable obligation where it is not probable that an outflow of resources will be required. Except for contingent liabilities recognised as part of a business combination, contingent liabilities are not recorded. Disclosure is provided in the notes to the financial statements.

3.9.2 Provisions for environmental risks

The company records provisions for environmental risks. This provision covers the costs of environmental protection and site restoration and clean-up. It mainly comprises:

- a provision for the elimination of creosote-treated railway sleepers classified by the French Environmental Code as hazardous waste that must be eliminated in facilities classified for environmental protection.
- a provision for building asbestos removal. Amounts recorded are based on the best possible estimate resulting from year-end assessments and take into account these valuations for known risks currently being assessed.
- a provision for rolling stock asbestos removal. These asbestos removal costs were provided for by offsetting them against a decommissioning asset as there is a decommissioning obligation at the end of the rolling stock's life.

3.9.3 Provision for employee benefits

Liabilities relating to employee benefits such as pensions, supplementary pensions, retirement termination benefits or similar benefits are recorded in full on the balance sheet as provisions, in accordance with the ANC's opinion backed by Article 324-1 of regulation 2014 03 relating to the French chart of accounts.

Considering that these benefits are settled several years after the personnel has rendered the corresponding services, the obligations under defined benefit plans are recognised using actuarial valuations based on financial and demographic assumptions including discount, inflation, and salary increase rates and mortality tables. Due to the long-term nature of these plans, changes in these assumptions can generate actuarial gains and losses and may lead to significant changes in the recorded commitments.

Current service cost and benefits paid are recognised respectively in operating provision charges and reversals. Actuarial gains and losses and reverse discounting impacts are recognised in finance cost.

Pension and similar plans

These benefits comprise end-of-career or termination benefits paid to contractual employees at retirement. In France, these benefits are determined in accordance with the national collective agreement or the company agreement in force. Paid at employment termination, they represent a post-employment benefit calculated on the last estimated end-of-career salary.

Provident plan

The provident plan concerns supplementary benefits for EPIC SNCF Réseau top executives not otherwise covered.

Social welfare initiatives

The SNCF Réseau Group implements various social welfare initiatives for personnel: access to infrastructures, consultation of social workers, etc. Both active (short-term benefits) and retired employees (post-employment benefits) may benefit from these initiatives.

A provision in the amount of benefit granted to retired employees was recognised.

Compensation for work-related injuries

Compensation for work-related injuries is self-financed for active and retired employees of EPIC SNCF Réseau, independently of the current general regime.

Life annuities are provided in full at the date of grant to injured employees without any seniority conditions. They represent long-term (active employees) and post-employment benefits (retired employees).

Gradual cessation of activity

The gradual cessation of activity is a procedure used to adjust the work time of employees who have reached the end of their careers. A work-time formula is thus arranged to provide a transition period between professional activity and retirement. The last agreement signed by EPIC SNCF Mobilités that came into effect in July 2008 offers the possibility of a gradual or complete cessation for the personnel of the 3 EPICs. The granting of benefits is based on a combination of criteria: years of service, hardship and employee category. The agreement is treated as a long-term benefit in the consolidated financial statements pursuant to IAS 19.

The calculation is mainly based on the assumption related to the expected proportion of employees to be covered by the procedure.

Long-service awards and other benefits

This heading combines the other long-term employee benefits granted by the Group, particularly bonuses with respect to long-term service awards (France).

Agreement on wage increases and buyback of quarters for former apprentices

On 28 October 2016, EPIC SNCF and all the trade union representatives signed a collective agreement negotiated for all the EPICs making up the public rail group. It covers wage increases relating to former apprentices and students and the set-up of a company financial contribution mechanism to buy back non-validated pension quarters of former apprentices, for apprenticeship periods prior to 30 June 2008.

As at 31 December 2017, this agreement covering wage increases and financial aid to buy back quarters from former apprentices resulted in the recognition of a provision for \notin 5.6 million.

Circulation privileges

EPIC SNCF Réseau personnel (active employees, retired employees and their beneficiaries) receive circulation privileges (CP) which enable them to travel under certain circumstances at prices that differ from the market. The Group considers that these travel privileges do not have a material impact on its production resources.

With respect to active personnel (over the period of activity), no liability is recognised since the CP are granted in consideration for services rendered by the beneficiaries over this period. They thus meet the definition of a short-term benefit.

For active employees over the post-employment period, current retirees and their beneficiaries, considering that the marginal average cost of this programme is lower than the average price paid on reservation, no liability is recorded in the financial statements regarding this post-employment benefit.

3.10 BORROWINGS

3.10.1 Debt type

For its financing requirements, SNCF Réseau relies on bond issues and loans from financial institutions.

3.10.2 Recognition principle

The recognition point for the accounting of a borrowing is its collection. Once the contract is signed, a financial commitment to be disclosed in the notes is created. The recognition point for the accounting of a repayment is its disbursement.

SNCF Réseau carries out all its issues with no redemption premium and always repays the amount at par, except for inflation-indexed bonds. However, certain issues can be carried

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out above and below par, in which case an issue premium (paid or received) is recorded. Market premiums/discounts may also be observed in the event of a bond tap (subsequent issue of bonds on an existing bond) with an purchase price that is higher or lower than the par value.

Bond issue premiums and costs are amortised on a straight-line basis over the life of the bond whatever the repayment rate.

For inflation-indexed issues, SNCF Réseau revalues the redemption premium based on changes in inflation. A provision for liabilities and charges is recorded at each balance sheet date. It represents the unrealised loss for the period.

Interest on borrowings is recorded in financial expenses. Accrued interest receivable is linked to debt in accordance with the borrowing amortisation plan. Paid accrued interest is recorded in prepaid expenses.

3.10.3 Foreign currency-denominated borrowings

At inception, the nominal amount of the borrowing is converted and recorded at the spot rate. At the closing, it is remeasured at the closing rate. The application of this conversion rate at the closing date generates foreign exchange differences which should be recorded in the transitional accounts as an offset against the borrowing account.

A provision should only be recorded for the hedged risk portion of unrealised foreign exchange losses. As SNCF Réseau's hedging strategy is systematically complete and perfectly matched, no provisions were recognised.

Coupon payments are converted and recorded at the spot rate on the coupon value date.

Accrued interest at the closing is recorded at the closing rate of exchange.

3.11 DERIVATIVE FINANCIAL INSTRUMENTS

3.11.1 Long-term debt hedging swaps

All derivatives designated for management hedging are treated in the accounts as if under French GAAP.

For all forward financial instruments, nominal amounts are mentioned in off-balance sheet commitments.

The balancing cash adjustment received or paid on the hedging swap is recorded in the balance sheet and spread out and recorded in profit or loss to match the profit or loss of the hedged item (borrowing) until the maturity of the borrowing.

Interest swaps are carried out at the closing rate.

Changes in the value of hedging instruments are not recognised in the balance sheet, unless the partial or total recognition of such changes ensures a symmetrical treatment with the hedged item, which is the case at SNCF Réseau.

This matching results in a remeasurement of the hedging instrument in a suspense account offset against a derivative instrument account in parallel with the foreign currency differences recorded for the hedged item.

At maturity, foreign exchange gains or losses are recorded in net finance costs and cancel out the P&L impact on the borrowing.

3.11.2 Forward purchases hedging short-term foreign currency debt

The premium/discount represents the difference between the spot rate and the forward rate. It is amortised in net finance costs over the hedging period.

The same accounting rules as long-term hedging swaps apply to foreign currency derivative items.

3.11.3 Isolated open positions

Isolated open positions refers to all transactions not designated for hedging. The nominal amount of derivative in an isolated open position is not recognised in the balance sheet and is recorded in off-balance sheet commitments. The balancing cash adjustment paid or received upon conclusion of the contract represents the fair value of the instrument on the payment date, and is recorded in the balance sheet. Derivatives in an isolated open position at SNCF Réseau do not generally present any balancing cash adjustment at inception.

Unrealised gains or losses are determined with reference to a market value or by applying generally accepted valuation techniques. The market value of isolated open positions is recorded in the balance sheet to present the company's exposure in a "cash instruments" account offset against a suspense account "Valuation difference (asset or liabilities) on derivative instruments in an isolated open position." Unrealised losses are systematically covered by a provision for liabilities recognised in net finance costs by consistent units for the same underlying.

3.12 RECOGNITION OF REVENUE AND OTHER INCOME

3.12.1 Revenue

SNCF Réseau recognises revenue at the date on which services are rendered or assets are delivered.

Infrastructure fee revenue, which accounts for most of the company's revenue, is recognised in the accounts when the trains effectively run on the network. Timing differences between revenue recognition and the issue of invoices result in revenue adjustment entries.

3.12.2 Distinction between profit or loss from ordinary activities before tax and exceptional profit or loss

Profit or loss from ordinary activities before tax corresponds to the sum of operating profit or loss and profit or loss from financial transactions. It therefore includes all the income and expenses directly relating to the company's operations.

Exceptional profit or loss comprises material items which, due to their type, unusual nature or non-recurrence, cannot be considered as inherent to the company's operations.

3.12.3 Income tax expense

Since 1 January 2015, SNCF Réseau has belonged to the tax consolidation scope headed by SNCF. A tax consolidation agreement was signed by both entities to guarantee a neutral option for SNCF Réseau under this tax regime.

Insofar the Competitiveness and Employment Tax Credit (CICE) is used by the company to finance expenditure related to working capital, it was analysed as a tax gain. Accordingly, the CICE is presented under "Income tax expense."

3.13 FINANCIAL RISK MANAGEMENT

SNCF Réseau is exposed to the following risks related to the use of financial instruments:

- currency risk,
- interest rate risk,
- liquidity risks,
- credit and counterparty risks.

These risk hedging procedures are strictly governed by the rules imposed by the SNCF Réseau Board of directors and contained in a document entitled "Principles and limits for trading on capital markets."

3.13.1 CURRENCY RISK MANAGEMENT

SNCF Réseau issues bonds in foreign currencies that are covered by currency hedges. The foreign currency denominated cash flows (principal payments and interest) are hedged by currency derivatives which convert this debt into euro debt.

At the year-end, unrealised losses on foreign currency financial instruments and hedged underlying are covered by a provision.

3.13.2 INTEREST RATE RISK MANAGEMENT

To limit its exposure to interest rate risk, SNCF Réseau breaks down its net debt into a fixed rate, floating rate and an inflation-indexed rate in accordance with the hedging policy approved by its Board of directors. To achieve this breakdown, SNCF Réseau may use option-based derivatives or interest rate swaps.

- Interest rate swaps

The company uses interest-rate swaps for its loan issues or to manage its existing net debt.

In connection with the active management of its interest rate risk, the company endeavours, wherever possible, to cancel existing contracts rather than carry out new hedging transactions, thus limiting its counterparty risks and commitments. The amount of balancing cash payments made or received on conclusion or cancellation of swaps is amortised over the life of the corresponding hedged items.

3.13.3 MANAGEMENT OF LIQUIDITY RISK

SNCF Réseau enjoys diversified access to both short-term (treasury bills, commercial paper) and long-term (public and private bond issues) financing sources.

SNCF Réseau has a 5-year €1.5 billion syndicated credit facility.

3.13.4 MANAGEMENT OF COUNTERPARTY RISK

SNCF Réseau is exposed to counterparty risk in connection with its cash investments and the subscription of derivatives from its financial partners, insofar as the debtor refuses to honour all or part of its commitment or does not have the means to respect it.

To manage and limit this risk, investment instruments and derivatives are only entered into with financial institutions corresponding to the credit rating and equity criteria validated by the SNCF Réseau Board of directors. A limited commitment amount by institution is determined according to these criteria. Compliance with the authorised threshold by counterparty is monitored on a daily basis.

To hedge counterparty risk regarding its derivative financial instruments, SNCF Réseau performs margin calls with its financial counterparties whose rating is lower than the threshold defined by the Board of directors. Collateral (in cash only) is called up in the amount of the market value of the financial instrument portfolios for each counterparty whom SNCF Réseau is at risk. Conversely, SNCF Réseau is required to pay out cash collateral to the counterparties with whom bilateral guarantee agreements have been signed.

3.14 CURRENT EMPLOYEE BENEFITS

For the basic plans and other defined-contribution plans, the Group expenses contributions payable when they are due. No provisions are recognised as the Group does not have any obligation beyond the contributions paid.

In the case of defined-benefit plans, when benefits are covered by third parties (insurance contracts, provident organisations unrelated to the Group), and the Group has no legal or implicit obligation to cover any losses relating to past services over the period or prior periods, no obligation is recognised and the insurance/provident premiums paid are recognised as payments to a defined contribution plan, the obligation to provide benefits to employees being the sole responsibility of the third party organisation. In the other cases, the obligations are subject to actuarial valuations and provisions are recorded on the balance sheet upon vesting of benefit rights by employees.

The actuarial liability (or present value of the obligation with respect to defined benefits) is determined according to the projected unit credit actuarial method, which stipulates that each period of service gives rise to an additional unit of benefit and measures each unit separately to determine the final obligation. These calculations include assumptions concerning the discount rate, mortality, employee turnover and expected future salary levels.

In the case of plans partially or fully funded by plan assets, the net liability (asset) is recognised in the amount of the negative or positive difference between the present value of the obligation and the fair value of the plan assets.

Changes in the net obligation are recorded according to their nature.

The net charge is recognised:

- In current operating profit for the portion corresponding to service costs representing the straight-line vesting of benefits, past service costs (plan amendment and curtailment) and the impact of settlements. Past service costs are immediately recorded in profit or loss whether the rights are vested or not.

- In finance cost for the portion corresponding to the net financial interest (cost of the reverse discounting of the debt less the implicit return on plan assets, if any, and the interest on the asset ceiling impact) and the actuarial gains and losses generated by other long-term benefits.

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4 NOTES TO THE BALANCE SHEET

4.1 INTANGIBLE ASSETS

	31 December 2017			31 December 2016		
	Gross	Amortisation and impairment	Net	Gross	Amortisation and impairment	Net
Intangible assets	1,712	-482	1,230	1,603	-401	1,202
Intangible assets in the course of development	141	-	141	103	-	103
Total	1,853	-482	1,371	1,706	-401	1,306

	Intangible assets	Intangible assets in the course of development	Total
Net carrying amount as at 31/12/2016	1,202	103	1,306
Gross acquisitions	46	100	146
Gross disposals	-2	-0	-2
Amortisation	-98	-	-98
Amortisation reversals	12	-	12
Provisions for impairment	5	-	5
Impairment losses	-	-	-
Transfer	-	-	-
Commissionings	65	-47	18
Other changes	0	-15	-15
Net carrying amount as at 31/12/2017	1,230	141	1,371

Investments in intangible assets for 2017 totalled €146 million, including €45 million for the SEA concession agreement.

4.2 PROPERTY, PLANT AND EQUIPMENT

	31 December 2017			31 December 2016		
	Gross	Depreciation and impairment	Net	Gross	Depreciation and impairment	Net
Land and buildings	11,301	-3,280	8,021	9,754	-3,133	6,620
Tracks, earthworks, engineering works and level crossings	47,930	-18,924	29,006	42,494	-18,047	24,446
Industrial and technical plant (ITP) and other assets	1,086	-743	343	919	-694	225
Electrification, telecommunications, signalling	15,510	-8,135	7,375	13,486	-7,641	5,845
Transportation equipment	1,157	-966	192	1,151	-952	199
Property, plant and equipment in the course of construction	12,116	-35	12,081	16,382	-32	16,349
Total	89,100	-32,082	57,018	84,185	-30,500	53,685

	Land and buildings	Tracks, earthworks, engineering works and level crossings	Industrial and technical plant (ITP) and other assets	Electrification, telecommunicat ions, signalling	Transportatio n equipment		Total
Net carrying amount as at 31/12/2016	6,620	24,446	225	5,845	199	16,349	53,685
Gross acquisitions	0	-0	-0	-	-	5,060	5,059
Gross disposals	-24	-1	-18	-2	-11	-	-56
Depreciation	-185	-1,099	-68	-581	-33	-24	-1,989
Provisions for impairment	-	19	-	-	5	-3	22
Depreciation reversals	3	220	20	88	11	21	362
Impairment losses	-	-	-	-	-	-	-
Transfer	-	-	-	-	-	-	-
Commissionings	1,587	5,440	184	2,025	19	-9,273	-18
Other changes	20	-20	0	0	1	-49	-48
Net carrying amount as at 31/12/2017	8,021	29,006	343	7,374	192	12,081	57,018

Assets impaired as at 31 December 2015 were subject to an exceptional depreciation charge based on the initial depreciation plan. An asset impairment reversal was recognised as at 31 December 2017 for \leq 328 million.

4.2.1 Investments

Investments in property, plant and equipment for 2017 totalled €5,059 million and mainly include:

- €4,912 million in infrastructure investments which break down as follows:
 - €4,125 million in direct production (of which renewal and performance: €2,426 million; Major development projects: €595 million; Regional development projects: €741 million),
 - €458 million in production relating to PPPs and concessions (GSMR: €7 million; BPL: €318 million; CNM: €133 million),
 - o €68 million in payments on account,
 - o €130 million in direct acquisitions,
 - o €119 million in major repairs.
- €147 million in other investments (rail equipment, machinery and other operating projects).

4.2.2 Commissionings during the year

Commissioned items of property, plant and equipment totalled €9,256 million:

- €4,721 million in commissioning of PPPs and concessions (SEA: €190 million; BPL: €2,892 million; CNM: €1,639 million),
- €4,014 million in rail projects (of which renewal and performance: €1,908 million; Major development projects: €822 million; Regional development projects: €829 million),
- €364 million for the GSMR PPP,

- €155 million for other projects, including rail equipment, machinery, property and other items.

4.2.3 Present value of assets at the year-end

The year-end impairment test on the Infrastructure CGU assets, carried out as at 31 December 2015, had led to an impairment loss of \notin 9.6 billion. At this year-end, the discussions with the French State prior to the signing of the multi-year performance contract stipulated by the law of 4 August 2014 had enabled management to build a financial trajectory for SNCF Réseau, taking into account the key changes and assumptions discussed and decided with the French State. On 9 March 2015, this financial trajectory was approved by the SNCF Réseau Board of directors, which considered that it represented the best business forecast for the next 15 years.

As part of the 31 December 2016 closing, the finalisation of the performance contract with the French State and its validation by the SNCF Réseau Board of directors on 20 December 2016 had represented an indication of a change in value. A new test was therefore carried out. The final version of the performance contract had led to the inclusion of additional productivity assumptions for expenses, the downward revision of platform fee assumptions, and the upward revision of compliance, renewal and industrial investment assumptions. The new test confirmed the network's economic value and served to move the test preparation method towards a more standard methodology, in line with the new context of the performance contract.

As part of the 31 December 2017 closing, changes in taxation (removal of the CICE and gradual decrease in the income tax rate) and the changes in employer and employee contributions announced in the French Finance Acts and the French Social Security Financing Law for 2018 represented indications of impairment and a new test was therefore carried out using the same methodology as the test performed on 31 December 2016.

Tested assets

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The reference net carrying amount of Infrastructure CGU assets was \notin 32.8 billion as at 31 December 2017, compared with \notin 30.1 billion as at 31 December 2016, after impairment. These assets cover service lines and ongoing renewal work.

Other assets under construction ($\notin 0.9$ billion as at 31 December 2017, compared to $\notin 1.4$ billion as at 31 December 2016) involve capacity investments under development, whose value is analysed separately as part of a specific review.

Methods implemented to determine the recoverable amount and key assumptions

The discounted forecast cash flows are calculated over the tenyear business trajectory from the 2017-2026 performance contract with the French State, extended until 2030, which represents a normative year, as the network will therefore be considered as stabilised at that date with a sufficient level of performance. With respect to the SEA concession, the cash flow forecasts took into account the line's renewed operation following the concession grantor's operating phase, that is to say by 2061.

The terminal value is calculated using the indefinite projection at a rate of 1.7% of cash flows generated by 2030.

The projected cash flows are post-tax, the tax rate used being a theoretical tax at rates known on the different dates and applied to forecast current operating profit or loss.

Future cash flows were updated at a rate of 5.3% compared to 5.2% during the test carried out on 31 December 2016.

The impairment test key assumptions cover the level of infrastructure fees, public backing and current network maintenance.

Traffic forecasts under the 10-year plan were prepared for the Public Rail Group. They are consistent with the SNCF Mobilités forecasts.

The public backing contributing to the support of this renewal trajectory was approved based on commitments confirmed by the French State.

The allocations paid by SNCF to SNCF Réseau pursuant to the rail reform law were also taken into account. They were qualified as investment grants used to finance network renewal.

Rail network maintenance in fact comprises two major categories of activity

- Renewal: facilities replacement or significant upgrade,
- Facilities maintenance: preventive and corrective maintenance and tail.

The SNCF Réseau financial trajectory calls for a much more substantial renewal effort for the existing network than in the previous decade. It also includes the first major renewals of the high-speed lines currently in service. Priority is given to the llede-France network and the major lines with the most traffic. The effort is two-phased: a gradual step-up in the process until 2020 so as to progressively mobilise human and material resources and subsequently a stabilisation from 2020 to 2027, followed by a gradual decrease until the normative year 2030 to reach a replacement level that is aligned with the network.

The combined effect of a maintenance effort and a forecast traffic increase optimised the trajectory in line with the productivity plans based on a strategy to intensify the outsourcing of studies, services and work and a performance and savings programme.

Impairment test results

The recoverable amount of the assets tested totalled \notin 33.1 billion as at 31 December 2017. The terminal value, calculated

using the indefinite projection of cash flows generated on 2030, represents 95.3% of this recoverable amount. As this value was slightly higher than the reference asset tested, SNCF Réseau maintained the same impairment loss of €9.6 billion (gross value) recognised as at 31 December 2015.

The estimates and assumptions taken into account to assess the recoverable amount of the assets are primarily based on the performance contract. This recoverable amount also depends on the French State's implementation of all the resources and commitments necessary for its support and the company's ability to meet its productivity plans. Actual results and certain future assumptions could differ significantly from the estimates adopted.

Sensitivity analyses

Sensitivity to the valuation parameters:

A change of +/- 10 basis points in the discount rate represents a change of -/+ \leq 1.3 billion in the recoverable amount.

A change of +/- 10 basis points in the perpetual growth rate results in a change of + €0.9 billion.

Sensitivity to cash flows over the 2017-2030 period (including corporate tax impact):

A change of +/- €100 million in net annual renewal expenses represents a change of -/+ €2.4 billion in the recoverable amount. This amount is indicative only since, beyond a certain threshold, the impact of the change in renewal expenses on the recoverable amount of assets is not linear and the impacts may be material for maintenance, traffic and therefore infrastructure fees.

An annual change of +/- €100 million in the infrastructure fees or the backing of the French State represents a change of +/- €1.8 billion in the recoverable amount.

	31 December 2017	31 December 2016	Change
Investment grants to be claimed	2,227	2,067	160
Guarantee deposits	1,338	6	1,332
Other financial receivables	16	20	-3
Equity investments	29	28	2
Total	3,611	2,120	1,490

As at 31 December 2017, long-term investments comprised grants to be claimed in the amount of \notin 2,227 million for current PPP agreements, including \notin 1,159 million for the Brittany-Pays de la Loire project. These long-term investments represent grants to be collected from the State by SNCF Réseau, enabling it to repay its debts owed to Eiffage for the Brittany-Pays de la Loire project.

SNCF Réseau recorded borrowings for the same amounts that it will also have to repay from 2017 (see Note 4.13 Borrowings).

"Guarantee deposits" primarily comprise asset margin calls (€1,084 million), due to the set-up of bilateral loans in 2017, and the Eole piggy-backing (€249 million).

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The financial receivables of €16 million mainly correspond to cash advances from a subsidiary.

Information in thousands of					Carry						
euros (K€)					amou shares		Loans and advances	Guarantee s and		Earnings	Dividends
Subsidiary name and registered office	Share capital	Equity	Capital held	Percentage of capital or earnings held	Gross	Net	granted by the companies and not yet repaid	endorsem ents	Pre-tax revenue of the prior year	(profit or loss of the prior year ended)	collected by the company during the year
1. Subsidiaries											
SFERIS	1,500	6,788	1,500	100.0%	6,000	6,000	12,000	-	90,816	1,455	-
1 CITE PARADIS, 75010 Paris											
ALTAMETRIS	2,108	2,056	2,108	100.0%	800	800	0	0	2,450	-52	0
130 rue du Faubourg Saint Denis, 75010 Paris											
2. Affiliates											
EURAILSCOUT BV	20,346	25,473	10,173	50.0%	21,800	21,800	-	-	26	2	-
Amersfoort, Niederlande											
ADIF Perpignan Figueras (LFP)	60	60	30	50.0%	30	30	-	-	-	-	-
Rue Sor angela de la cruz, N3 Madrid											
SNCF INFRA LBA DEVELOPPEMENT	350	270	140	40.0%	138	138	-	-	NC	(11)	-
18 RUE DE DUNKERQUE, 75010 Paris											
CDG EXPRESS ETUDES	10	10	3	33.3%	3	3	-	-	-	-	-
291 bld Raspail 75014 Paris											
CADEMCE	1,860	NC	464	25.0%	464	464	-	-	NC	NC	-
14 VC QUAI DE LA SOMME, 80080 Amiens											
EURAILSCOUT France	38	1,535	1	2.6%	1	1	-	-	7,689	0	-
20 RUE DES PETITS HOTELS, 75010 Paris											
GEIE CFM4 (corridor ferroviaire de marchandise n°4)	-	-	-	33.0%	-	-	-	-	-	NC	-
92 av de France , 75013 Paris											
GEIE SEA VITORIA DAX 7 A TERRASSE DU FRONT DU	-	-	-	50.0%	-	-	-	-	-	NC	-
MEDOC, 33075 Bordeaux											
GEIE NAF GCT PLACE DE NUESTRA SENORA DEL PILAR, 50071 Saragosse	-	-	-		-	-	-	-	-	-	-
GEIE RFC2 CORRIDOR C	0	0	0	49.0%	0	0	0	0	0	NC	0
9 PLACE DE LA GARE, L1616 Luxembourg											
GEIE RFC6	0	-	-	20.0%	-	-	-	-	-	NC	-
PIAZZA DELLA CROCE ROSSA, 00161 Rome											
GEIE DES UTILISATEURS DE ERTMS 123/133 RUE FROISSAR, 1040	-	-	-	16.7%	-	-	-	-	-	NC	-
Bruxelles RAILENIUM											
Académie de Lille	-	-	-		-	-	-	-	-	-	-

4.4 INVENTORY AND WORK-IN-PROGRESS

	31 December 2017	31 December 2016	
	Gross	Gross	Change
Raw materials	542	510	32
Finished goods	73	67	6
Work-in- progress	22	20	2
Total inventories and work-in-	637	597	41

	Impairment as at 31 December 2016	Increase	Decreas e	Impairment as at 31 December 2017
Trade receivables and related accounts	-45	-55	44	-56
Other operating receivables	-83	-7	2	-88
Total impairment of receivables	-128	-62	46	-144

The impairment losses relating to the transfer under the rail reform based on the IFRS values to which a tax credit was allocated on the same bases as the relevant assets mainly involve grant and trade receivables.

4.6 DEBT MATURITY ANALYSIS - ASSETS

	31 December 2016	Increase	Decrease		31 December 2017
Raw materials	-109	-13		9	-114
Finished goods	-	-		-	-
Work-in-progress	-	-		-	-
Total impairment of inventories and work-in- progress	-109	-13		9	-114

Inventories are written down based on the turnover, nature, age and useful life of items.

4.5 OPERATING RECEIVABLES

	31 December 2017	31 December 2016	Change
Trade receivables and related accounts	1,343	1,340	3
Other operating receivables	3,277	3,371	-94
Grants to be collected	969	1,160	-191
Grants to be claimed	1,097	1,138	-41
VAT receivables	512	507	5
SNCF Mobilités receivable, including CICE	41	41	-0
Tax receivables and tax credits*	303	198	105
Other receivables	328	295	33
Receivables from asset disposals	28	32	-4
Payments on account for inventories	106	297	-192
Total	4,726	5,008	-282

*€68 million in deferred tax assets classified as tax receivables.

	31 December 2017	< 1 year	> 1 year
Trade receivables and related accounts	1,343	1,258	85
Other operating receivables	3,277	2,489	788
Grants to be collected	969	440	529
Grants to be claimed	1,097	1,097	-
VAT receivables	512	512	-
Mobility receivable, including CICE	41	41	-
Tax receivables and tax credits	303	44	259
Other receivables	328	328	-
Receivables from asset disposals	28	28	-
Payments on account for inventories	106	106	-
Gross value	4,726	3,853	873

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4.7 MARKETABLE AND SIMILAR SECURITIES, CASH AT BANK AND IN HAND

	31 December 2017	31 December 2016	Change
Initial maturity of more than three months and/or subject to interest rate risk	50	-	50
Bonds	-	-	-
Negotiable debt securities	50	-	50
Initial maturity of less than three months and without interest rate risk	2,231	2,403	-172
Bonds	-	-	-
Negotiable debt securities	25	150	-125
Unsecured loan	-	300	-300
UCITS	2,206	1,953	253
Foreign currency investments	-	-	-
Accrued interest receivable	-0	-0	-0
Sub-Total Marketable securities	2,281	2,403	-122
Cash at bank and in hand	1,086	816	270
Total	3,367	3,219	148

All UCITS correspond to low-risk mutual funds.

4.8 PREPAYMENTS AND DEFERRED CHARGES

	31 December 2017	31 December 2016	Change
Deferred charges	498	543	-45
Loan issue costs	200	175	25
Valuation difference on derivative instruments - assets	345	-	345
Total Other prepayments and deferred charges - Assets	1,044	718	326

The increase was primarily due to the implementation in 2017 of ANC 2015-05 standard-setting changes and the remeasurement of long-term hedging instruments (+ \in 345 million).

4.9 UNREALISED FOREIGN EXCHANGE LOSSES

	31 December 2017	31 December 2016	Change
Unrealised foreign exchange losses	2,033	227	1,806
of which difference in inflation indexation	254	227	27
of which exchange difference - assets	1,779	-	1,779
Total unrealised foreign exchange losses	2,033	227	1,806

The increase was attributable to the implementation in 2017 ANC 2015-05 standard-setting changes. These concern the remeasurement of foreign currency borrowings and their related hedging instruments (€1,777 million) at closing rates as well as the balance sheet recognition of the market value of derivatives in isolated open positions (€2 million).

4.10 EQUITY

	Capital injection	Accumulat ed deficit	Net profit/(loss) for the year	Net worth	Investment grants	Equity
Equity as at 31 December 2016	9,765	-24,341	-413	-14,990	23,851	8,861
Appropriation of 2016 loss	-	-413	413	0	-	0
2017 net profit/(loss)	-	-	-295	-295	-	-295
Movements in grants	-	-	-	-	2,219	2,219
Grants recorded in the income statement	-	-	-	-	-759	-759
Reclassification	-	-	-	-	-0	-0
Transfer	-	-	-	-	-	-
Equity as at 31 December 2017	9,765	-24,755	-295	-15,285	25,312	10,027

As a State-owned industrial and commercial institution, SNCF Réseau does not have any capital in the legal sense of the term, nor shares, nor does it pay dividends. corresponding to the difference in value between its assets and liabilities. The French State then increased this initial capital by means of additional injections until early 2003.

At the time of its creation, SNCF Réseau had equity of €0.86 billion for accounting purposes,

As at 31 December 2017, capital injections totalled ${\tt €9,765}$ million.

4.11 INVESTMENT GRANTS

4.11.1 Summary of grants for assets in the course of construction and commissioned assets

	31 December 2017			31	December 2016	
	Grants for commissione d assets	Grants for assets in the course of construction	Total	Grants for commissione d assets	Grants for assets in the course of construction	Total
Development grants for assets in the course of construction	-	3,722	3,722	-	6,820	6,820
Development grants for commissioned assets	18,131	-	18,131	13,604	-	13,604
Renewal grants for commissioned assets	3,289	-	3,289	3,301	-	3,301
Renewal grants for assets in the course of construction	170	-	170	126	-	126
Total	21,590	3,722	25,312	17,031	6,820	23,851

	Net amount as at 31/12/2016	Grants allocated to commissioned assets during the year	Share of grant released to profit or loss	Other changes	Net amount as at 31/12/2017
Land, buildings and fixtures and fittings	1,764	1,001	-80	-	2,685
Tracks, earthworks, engineering works and level crossings	8,840	17	-225	-6	8,626
ITP, electrification, telecom	2,983	4,135	-306	-	6,812
Intangible assets	17	-	-9	-	8
Total	13,604	5,153	-620	-6	18,131

4.11.2 Grants for assets in the course of construction

Earned grants related to assets in course of construction are recognised under the percentage of completion method. They are included in equity under Investment grants for assets in the course of construction.

4.11.3 Grants for renewals and upgrade and compliance work

All the renewal grants received from the French State until 2008 inclusive were allocated to commissioned programmes. They continue to be released to profit or loss according to the schedule presented in the table below:

Year of commissioning	Commissioning date	Period of release (in years)	Amount commissioned	Accumulated release	Net amount as at 31/12/2017
2004	01/07/2004	38	675	239	436
2005	25/03/2005	42	574	173	401
2006	09/05/2006	42	878	243	635
2007	21/03/2007	35	734	225	509
2008	17/04/2008	33	69	30	39
2009	17/01/2009	42	844	218	626
2010	22/01/2010	38	436	138	298
2011	01/01/2011	51	20	15	5
2012	01/01/2012	28	255	94	161
2013	01/01/2013	41	75	19	56
2016	01/01/2017	38	126	3	123
Total renewal grants for	r commissioned assets		4,686	1,397	3,289

4.12 PROVISIONS FOR LIABILITIES AND CHARGES

	31 December 2016	Charges	Reversals	Reclassification	31 December 2017
Employee benefits	907	96	-80	-	923
Environmental risks	169	10	-13	1	167
Tax and employee-related risks	53	4	-0	-	57
Contractual litigation	210	53	-181	-	81
- Currency and interest rate risk	-	-	-	-	-
Financial risks	231	25	-	-	256
Other provisions for liabilities and charges	5	0	-2	-	3
Total provisions	1,575	188	-277	1	1,487

Employee benefits include benefits involving compensation for work-related injuries (€497 million), Gradual Cessation of Activity (€175 million), social welfare initiatives (€98 million), time savings account (€82 million), long-service awards (€24 million), the senior executive supplemental provident plan (€17 million), pensions, unemployment benefits and termination benefits (€30 million).

Environmental risks primarily concern the elimination of creosote-treated railway sleepers for €91 million and asbestos removal for €43 million.

Regarding tax and employee-related risks, as a precautionary measure, the company provides for tax reassessments and employee-related risks. This heading mainly concerns the litigation involving wages (€52 million).

Ruling of the Paris Industrial Tribunal

The Paris Industrial Tribunal handed down its decisions on 21 September 2015 with respect to the appeals filed by former Moroccan employees. The Company accounted for the consequences in its financial statements based on the penalties handed down. An appeal was filed, thus suspending payment of the sums claimed. These first cases were argued before the Appeal Court in May 2017 and a ruling was handed down on 31 January 2018. Furthermore, new cases will be brought for the first time before the Industrial Tribunal and argued at the end of the first quarter 2018. An additional provision is set aside as and when new appeals are filed with the Paris Industrial Tribunal.

<u>Tax audit</u>

SNCF Réseau was the subject of a tax audit concerning fiscal years 2012, 2013 and 2014 that resulted in the receipt of a tax reassessment at the end of July 2016.

The main grounds for reassessment involve the reclassification of TER access fees as a balancing grant, which directly subjected the company to the tax on wages and indirectly weakened the Infrastructure asset impairment test. This reassessment was formally challenged by the company. To date, the company has yet to receive a reply to its challenge.

The reassessments that were not challenged by the company were covered in a provision of \notin 3 million.

Should the tax authorities maintain their position, SNCF Réseau will have recourse to litigation.

In 2017, SNCF Réseau rolled out the changes recommended by the tax legislation department as part of its response to the company's advance ruling request. These modifications involve the annual agreement between the French State and SNCF 142 - SNCF RESEAU 2017 FINANCIAL REPORT Réseau which determines access fees and the TER access fee invoices sent to the French State on behalf of the regions. They confirm the classification of TER access fees as revenue, in consideration for the services rendered, in accordance with the tax authorities.

Appeal to the *Conseil d'Etat* for the calculation of old age <u>contribution rates</u>

In a decree of 2 May 2017, the final T1 rates for 2013, 2014, 2015 and 2016 were published in the *Journal Officiel*. They incorporate the new calculation method recommended by the company and approved by the *Conseil d'État* in its 2016 rulings.

Accordingly, accrued income of €8 million was recognised in the 2017 financial statements, under "Other operating income and expenses" in the income statement.

In a decree of 2 May 2017, the T2 rate, the other flat-rate contribution paid in discharge of liabilities to finance the special railway employee pension plan, was raised by 2 points (from 11.81% to 13.85%) as at 1 May 2017, i.e. a negative impact of €22 million in 2017. On 23 May 2017, the company filed an appeal with the *Conseil d'État* in accordance with the decree of 28 June 2007

The Contractual Litigation heading for €81 million mainly concerns Culoz (€8 million), the Eckwersheim accident (€3 million), the Marseille St Charles derailment (€3 million), flooding in 2016 (€8 million) and commercial litigation (€35 million). The provision relating to the litigation regarding the Arles flooding in December 2003 was fully reversed following the decision issued on 15 November 2017 by the *Conseil d'Etat* that was favourable since it dismissed the appeal filed by the insurers (-€119 million).

Financial risks involve indexation risks (\notin 254 million) and swap interest rate risks (\notin 3 million).

Other provisions for liabilities and charges involve the provision for lease payments for 92 avenue de France.

Despite the provision updates in 2017, an uncertainty surrounding the assessment of two provisions remains:

Decontamination and environmental risks:

The provision recognised at the year-end was calculated based on the knowledge on this date of the assets to be treated; this provision is still to be gradually updated as SNCF Réseau continues its work to identify the programs to be implemented and quantify the corresponding decontamination costs. SNCF Réseau will be able to estimate a possible provision for environmental risks when the list of these facilities is finalised.

Ongoing litigation: Brétigny-sur-Orge accident:

Following the derailment on 12 July 2013 of Paris-Limoges intercity train no. 3657 in Brétigny-sur-Orge (Essonne) station, and after having filed the two expert reports requested by the investigating judges, RFF and SNCF, which became SNCF Réseau and SNCF Mobilités, respectively, on 1 January 2015, were indicted for "involuntary manslaughter and unintentional injuries through carelessness, recklessness, inattention, negligence, or failure to observe an obligation of due care or precaution" and heard by the judges.

SNCF Réseau and SNCF Mobilités firmly challenged the expert reports, cast doubt on the seriousness of the metallurgical evaluation, and requested that additional work was to be carried out for which the approval was notified at the end of January 2016.

Since the accident, SNCF Mobilités has set up a dedicated team to assist the victims and their families. Under the aegis of the coordination authority designated by the Ministry of Transport, SNCF Mobilités immediately committed to a compensation programme for the accidents human and material consequences. The liability insurer has now assumed responsibility for the compensation since the date the deductible (€3 million) was exceeded.

As a precautionary measure, on 8 October 2013, SNCF Mobilités and SNCF Réseau launched the Vigirail programme, designed to improve switching safety and upgrade track maintenance. This program includes actions that meet the recommendations issued by the BEA-TT in its progress report of 10 January 2014. Following the conclusions of the final report made public by the BEA-TT on 18 September 2015, SNCF Mobilités has pledged to implement three new recommendations.

Eckwersheim TGV high-speed train accident

On 14 November 2015, a test train on the high-speed train derailed, leaving 11 dead and 42 injured in Eckwersheim, Alsace, on the new future East European line. In the minutes following the accident, the General Director for Railway System

Safety initiated an immediate investigation with the SNCF General Safety Audit Department, at the request of the SNCF Executive Board. The internal report was submitted to the Chairmen on 19 November 2015. After examining the events recorder, the investigators established that the speed of the test train at the moment it entered the track section exceeded the recommended speed for a test program. This high speed was due to a late braking sequence in the test train.

Derailment in Culoz

On 24 July 2006, a work train comprising several components and partly belonging to SNCF and ETF derailed on the Rhône bridge between Culoz and Vions. The roles and responsibilities in the work train authorisation were shared between SNCF, the train designer and manufacturer and the owner. SNCF may be considered as partly responsible. The proceedings are still ongoing.

The remaining provisions for contractual litigation and risks comprise amounts that are individually immaterial.

4.13 BORROWINGS

SNCF Réseau raises funds on international capital markets in order to cover its long-term financing needs, mainly through bond issues and private placements and, to a lesser extent, borrowings from banks and/or local authorities.

The IFRS net debt repayment amount (excluding PPP, accrued interest receivable, collateral and closing rate remeasurement) totalled €45 billion, compared to €42 billion as at 31 December 2016, i.e. an increase of €3 billion, comprising:

- Long-term resources raised by SNCF on government bond markets in 2017 represented a total repayment amount of €4.9 billion,
- Bond repayments in euros and dollars for €1.4 billion,
- Financial receivable relating to the piggy-backing under the Eole agreement for €0.2 billion.

For its internal financing and cash management, SNCF Réseau uses both national and international short-term financing and investment instruments such as Treasury bills and Commercial Paper.

	31 December 2017	31 December 2016	Change
Long-term debt	46,129	43,544	2,585
Outstanding principal:	45,477	42,914	2,563
Long-term	44,923	42,458	2,465
Of which exchange difference	-1,026	-	-1,026
Of which inflation	254	227	26
RIF loans	34	37	-3
Zero coupon	521	419	102
Accrued interest:	652	630	22
SNCF debt	691	697	-6
Outstanding principal:	670	676	-6
Transferred debt (historical price)	666	671	-5
RIF loans	4	4	-0
EIB credit line renewal	-	-	-
Accrued interest	21	21	-0
Guarantee deposits received	5	4	0
Short-term debt	1,620	1,599	21
exchange difference	-60	-	-60
Margin calls (Liabilities)	64	34	30
Bank overdrafts	23	58	-35
PPP payable	2,221	2,067	154
Total borrowings	50,753	48,004	2,749
- Cash at bank and in hand – marketable securities (1)	-3,329	-3,233	-96
- PPP receivable	-2,227	-2,067	-160
- Margin calls (Assets)	-1,084	-	-1,084
- Other financial assets (2)	-309	-12	-297
Net debt as a carrying amount	43,804	42,692	1,112
- Accrued interest receivable	-673	-651	-22
- Margin calls (Liabilities)	1,019	-34	1,054
- PPP payable and receivable	6	-	6
- exchange difference	1,086	-	1,086
Net debt repayment amount	45,243	42,007	3,236

(1) including the SFERIS current account advance (2) including the SFERIS loan

The BPL, CNM and GSMR borrowings relate to the Brittany-Loire, Nîmes-Montpellier Bypass and Global System for Mobile communication for Railways PPPs. They represent SNCF Réseau's debt to its partners that are pre-financing part of the projects. Since 2017, SNCF Réseau has repaid the BPL and CNM debts. Claims were received by the company from 2015 to 2017 for the CNM and BPL PPPs for ${\rm \xi}634$ million. These claims were mostly challenged by the company and only the accepted portion was recognised.

SNCF Réseau borrowings

The following tables provide a breakdown by foreign currency and interest rate type of SNCF Réseau's hedged short and long-term borrowings:

A - SNCF Réseau debt: 48,184 2,854 1. Bond issues: 46,503 1,173 Total fixed rate: 41,559 1,170 Total inflation: 3,291 - Total floating rate: 1,653 3 EUR fixed rate 31,673 1,100 EUR inflation 3,291 - Total EUR 1,571 3 Total EUR 36,534 1,103 AUD fixed rate 64 - AUD floating rate - -	10,802 10,802 10,333 - 469 6,055 - 469 6,524	34,528 34,528 30,056 3,291 1,180 24,518
Total fixed rate: 41,559 1,170 Total inflation: 3,291 - Total floating rate: 1,653 3 EUR fixed rate 31,673 1,100 EUR inflation 3,291 - EUR floating rate 1,571 3 Total EUR 36,534 1,103 AUD fixed rate 64 - AUD floating rate - -	10,333 - 469 6,055 - 469	30,056 3,291 1,180
Total inflation: 3,291 - Total floating rate: 1,653 3 EUR fixed rate 31,673 1,100 EUR inflation 3,291 - EUR floating rate 1,571 3 Total EUR 36,534 1,103 AUD fixed rate 64 - AUD floating rate - -	- 469 6,055 - 469	3,291 1,180
Total floating rate: 1,653 3 EUR fixed rate 31,673 1,100 EUR inflation 3,291 - EUR floating rate 1,571 3 Total EUR 36,534 1,103 AUD fixed rate 64 - AUD floating rate - -	6,055 - 469	1,180
EUR fixed rate 31,673 1,100 EUR inflation 3,291 - EUR floating rate 1,571 3 Total EUR 36,534 1,103 AUD fixed rate 64 - AUD floating rate - -	6,055 - 469	
EUR inflation3,291-EUR floating rate1,5713Total EUR36,5341,103AUD fixed rate64-AUD floating rate	- 469	24,518
EUR floating rate1,5713Total EUR36,5341,103AUD fixed rate64-AUD floating rate		
Total EUR36,5341,103AUD fixed rate64-AUD floating rate		3,291
AUD fixed rate64-AUD floating rate	4 524	1,098
AUD floating rate	0,524	28,906
	-	64
Total AUD 64 -	-	-
	-	64
CAD fixed rate 192 -	-	192
CAD floating rate	-	-
Total CAD 192 -	-	192
CHF fixed rate 1,342 70	657	616
CHF floating rate	-	-
Total CHF 1,342 70	657	616
GBP fixed rate 5,199 -	1,229	3,971
GBP floating rate 83 -	-	83
Total GBP 5,282	1,229	4,053
HKD fixed rate 112 -	-	112
HKD floating rate	-	-
Total HKD 112 -	-	112
JPY fixed rate 424 -	229	196
JPY floating rate	-	-
Total JPY 424 -	229	196
NOK fixed rate 66 -	-	66
NOK floating rate	-	-
Total NOK 66 -	-	66
SEK fixed rate 236 -	-	236
SEK floating rate	-	-
Total SEK 236 -	-	236
USD fixed rate 2,251 -	2,164	87
USD floating rate	-	-
Total USD 2,251 -	2,164	87
2. Negotiable debt securities :	-	-
Treasury bills		-
Commercial Paper 1,680 1,680	-	
USD 1,680 1,680	-	-

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	Gross	One year or less	Between one and five years	More than 5 years
B - ACCRUED INTEREST:	658	658	-	-
Bond issues:	652	652	-	-
Total fixed rate:	582	582	-	-
Total inflation:	59	59	-	-
Total floating rate:	11	11	-	-
EUR fixed rate	445	445	-	-
EUR inflation	59	59	-	-
EUR floating rate	10	10	-	-
Total EUR	514	514	-	-
CAD fixed rate	1	1	-	-
CAD floating rate	-	-	-	-
Total CAD	1	1	-	-
CHF fixed rate	27	27	-	-
CHF floating rate	-	-	-	-
Total CHF	27	27	-	-
GBP fixed rate	90	90	-	-
GBP floating rate	1	1	-	-
Total GBP	91	91	-	-
HKD fixed rate	2	2	-	-
HKD floating rate	-	-	-	-
Total HKD	2	2	-	-
JPY fixed rate	2	2	-	-
JPY floating rate	-	-	-	-
Total JPY	2	2	-	-
NOK fixed rate	2	2	-	-
NOK floating rate	-	-	-	-
Total NOK	2	2	-	-
SEK fixed rate	3	3	-	-
SEK floating rate	-	-	-	-
Total SEK	3	3	-	-
USD fixed rate	9	9	-	-
USD floating rate	-	-	-	-
Total USD	9	9	-	-
Negotiable debt securities :	7	7	-	-
Treasury bills	-	-	-	-
Commercial Paper	-	-	-	-
USD	7	7	-	-
C - DEFERRED INTEREST:	13	13	-	-
Treasury bills	-	-	-	-
Euro Commercial Paper	-	-	-	-
USD	13	13	-	-

SNCF debt

The following table provides a breakdown by currency and rate of the transferred SNCF debt:

	Gross	One year or less	Between one and five years	More than 5 years
A - SNCF DEBT:	670	5	50	615
Total fixed rate:	613	-	-	613
Total floating rate:	57	5	50	1
EUR fixed rate	613	-	-	613
EUR floating rate	57	5	50	1
Of which RIF loans	4	-	2	1
Total EUR	670	5	50	615
B - ACCRUED INTEREST:	21	21	-	-
Total fixed rate:	21	21	-	-
Total floating rate:	-	-	-	-
EUR fixed rate	21	21	-	-
EUR floating rate	-	-	-	-
Total EUR	21	21	-	-

LONG-TERM BORROWINGS

The breakdown of long-term borrowings after hedging, at the hedging rate, is as follows:

	Fixed	rate	Inflation- rat		Floating	g rate	Tot	al
	Dec17	Dec16	Dec17	Dec16	Dec17	Dec16	Dec17	Dec16
SNCF RESEAU	41,559	38,450	3,291	2,808	1,653	1,657	46,503	42,914
SNCF	613	613	-	-	57	62	670	676
Total EUR:	42,172	39,063	3,291	2,808	1,710	1,719	47,173	43,590
As a %:	89%	90%	7%	6%	4%	4%	100%	100%

4.14 OPERATING PAYABLES AND OTHER ACCOUNTS IN CREDIT

	31 December 2017	31 December 2016	Change
Trade payables and related accounts	2,731	2,724	7
Of which fixed asset suppliers	796	924	-128
Tax and employee-related payables	1,076	1,062	14
Personnel and social security bodies	607	586	22
Tax on revenue	428	416	12
French State and local authorities	11	30	-19
Tax payable on investments	27	27	0
VAT on fixed assets	3	3	-0
Other operating payables	2,069	2,062	7
Grants claimed in advance	1,862	1,866	-3
Other payables	206	196	10
Total operating payables	5,876	5,848	28

4.15 DEBT MATURITY ANALYSIS - OPERATING LIABILITIES

	31 December 2017	Maturing in less than 1 year	Maturing in more than 1 year
Trade payables and related accounts	2,731	2,731	0
Of which fixed asset suppliers	796	796	0
Tax and employee- related payables	1,076	1,076	0
Personnel and social security bodies	607	607	0
Tax on revenue	428	428	0
French State and local authorities	11	11	0
Tax payable on investments	27	27	0
VAT on fixed assets	3	3	0
Other operating payables	2,069	2,069	0
Grants claimed in advance	1,862	1,862	0
Other payables	206	206	0
Total operating payables	5,876	5,876	0

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4.16 OTHER ACCRUALS AND DEFERRED INCOME

	31 December 2017	31 December 2016	Change
Accruals and deferred income - Financial transactions	2,640	1,336	1,304
of which valuation difference on derivative instruments - liabilities	1,431	-	1,431
Total Other accruals and deferred income - Liabilities	2,640	1,336	1,304

4.17 UNREALISED FOREIGN EXCHANGE GAINS

	31 December 2017	31 December 2016	Change
Unrealised foreign exchange gains	-1,779	0	-1,779
of which exchange difference - liabilities	-1,779	0	-1,779
Total unrealised foreign exchange gains	-1,779	-	-1,779

The increase was primarily due to the implementation in 2017 of ANC 2015-05 standard-setting changes and the remeasurement of long-term (+€1,371 million) and short-term (+€60 million) hedging instruments.

The increase was attributable to the implementation in 2017 ANC 2015-05 standard-setting changes. These concern the remeasurement of foreign currency borrowings and their related hedging instruments (€1,777 million) at closing rates as well as the balance sheet recognition of the market value of derivatives in isolated open positions (€2 million).

5 NOTES TO THE INCOME STATEMENT

5.1 BREAKDOWN OF REVENUE

Revenue mainly comprises services carried out in the context of railway activities and is recognised at the date on which these services are rendered. These infrastructure fees primarily break down as follows:

- train path access fee,
- reservation fee,
- traffic fee,
- station access fee (platform fee),

- electrical traction usage fee, including the fee to use electrical traction installations (RCE) and the electricity transmission and distribution fee (RCTE).

Added to these infrastructure fees is the rate compensation paid by the French State to cover the marginal cost of freight traffic, together with the fees paid by freight companies. They are recognised in revenue as they are analysed as price supplements.

Other income primarily comprises sales of supplies (old materials) and "non-traffic" related products comprising rental income.

	31 December 2017	31 December 2016	Change
Access fees	1,971	1,978	-7
Reservation fees	2,079	2,048	31
Traffic fees	1,378	1,350	28
Platform fees	122	121	0
Additional electrical traction fees	231	239	-8
Other proceeds	-	-	-
Sub-total infrastructure sale proceeds	5,780	5,735	44
Other income	686	661	25
Total revenue	6,466	6,397	69

5.2 OWN PRODUCTION AND CHANGE IN INVENTORIES AND WORK-IN-PROGRESS

Prior to the rail reform, most capitalisable expenditure was directly recorded in the balance sheet without passing through the income statement.

	31 December 2017	31 December 2016	Change
Own production - Purchases and external charges	3,166	2,598	569
Own production - Employee benefit expense	1,177	1,154	23
Change in inventories and work-in-progress	85	109	-24
Total Own production	4,429	3,861	568

5.3 OTHER OPERATING INCOME

	31 December 2017	31 December 2016	Change
Operating grants	132	105	27
Other income	16	7	9
Total Other operating income	148	112	37

5.4 PURCHASES AND EXTERNAL CHARGES

5.4.1 Breakdown of purchases and external charges

	31 December 2017	31 December 2016	Change
Transmission and traction means	-281	-336	55
Upkeep and maintenance	-2,236	-1,877	-359
Professional fees and IT services	-706	-551	-155
Property	-742	-657	-85
Other purchases and external charges	-1,528	-1,465	-64
Total	-5,492	-4,886	-607

5.4.2 Other purchases and external charges

Following the implementation of the reform on 1 July 2015, assets were produced internally within SNCF Réseau, resulting in the expensing of purchases and external charges and a corresponding entry in own production.

5.5 TAXES AND DUTIES OTHER THAN INCOME TAX

	31 December 2017	31 December 2016	Change
Property taxes	-25	-26	1
Company value- added contribution and company property contribution	-85	-90	5
Sub-total Other taxes and duties	-103	-105	1
Tax on wages	-6	-7	0
Apprenticeship tax	-16	-14	-1
Vocational training	-17	-28	11
Construction levy	-10	-10	-0
Other taxes and duties (including C3S)	-20	-15	-5
Transport payment	-35	-32	-3
Taxes and duties other than income	-214	-221	7

5.6 EMPLOYEE BENEFIT EXPENSE

	31 December 2017	31 December 2016	Change
Wages and salaries	-2,315	-2,283	-32
Pension contributions	-664	-640	-24
Other social security contributions	-507	-581	74
Expenses relating to vacation, leave and early departures	-31	-16	-15
Sub-total	-3,516	-3,520	3
Seconded personnel	-72	-47	-25
Total employee benefit expense	-3,588	-3,567	-21
Total average number of paid employees	57,692	57,744	-52

	31 December 2017	31 December 2016	Change
Share of the grant released to profit or loss	720	671	49
Reversal of the renewal grant	41	-0	41
Reversals of provisions for non-current assets	22	3	18
Reversals of provisions for impairment of receivables	46	6	40
Reversals of provisions for inventory write-downs	9	102	-94
Reversals of provisions for liabilities and charges	259	119	140
Expense reclassifications	37	92	-55
Total reversals	1,134	995	140

5.9 FINANCE COST

31 December 31 December 2017 2016 Change -1,480 -1,408 -72 Net borrowing costs Net finance cost of -31 -19 -13 employee benefits Dividends 0 0 0 Other financial -27 -28 1 expenses Other financial 113 12 100 income Total finance cost -1,426 -1,442 17

5.7 STATUTORY AUDITORS' FEES

Statutory auditors' fees amounted to ${\bf \xi}{\bf 1}$ million in 2017 and break down as follows:

- statutory audit of the 2017 financial statements for €1 million (PWC for €0.3 million, EY for €0.3 million),
- Services other than account certification for €0.1 million (PwC)

5.8 DEPRECIATION, AMORTISATION AND PROVISIONS, NET

	31 December 2017	31 December 2016	Change
Charge to depreciation and amortisation	-1,703	-1,502	-201
Charge to provisions for non-current assets	-23	-14	-9
Charge to provisions for impairment of receivables	-61	-36	-25
Charge to provisions for inventory write-downs	-13	-101	88
Charge to provisions for liabilities and charges	-125	-153	28
Total charges	-1,925	-1,806	-119

5.10 NET EXCEPTIONAL PROFIT/(LOSS)

The 2017 net exceptional profit of €68 million primarily comprised net proceeds from asset disposals in the amount of €74 million.

6 INFORMATION ON TAXATION

Since 1 January 2015, SNCF Réseau has belonged to the tax consolidation scope headed by SNCF. A tax consolidation agreement was signed by both entities to guarantee a neutral option for SNCF Réseau under this tax regime.

Accordingly, tax loss carryforwards break down as follows:

- Tax losses prior to SNCF Réseau's entry into the tax consolidation group: €10,132 million,
- Tax losses since 1 January 2015 attributable to the taxable profits of the tax consolidation group: €1,014 million.

7 RELATED PARTY DISCLOSURES

SNCF Réseau, as an industrial and commercial public institution wholly owned by the French State (via the French Government Shareholding Agency), is related to all companies and entities controlled by the French State.

Therefore, the main related parties with which SNCF Réseau interacts are the other EPICs belonging to the Public Rail Group, SNCF Mobilités and SNCF as well as the French State as sole shareholder. Transactions between SNCF Réseau Group and other State companies (EDF, La Poste, etc.) are all performed on an arm's length basis. No Group companies other than the parent company carry out material transactions with these related parties.

7.1 RELATIONS WITH THE RAIL GROUP

Relations with SNCF Mobilités

SNCF Mobilités is currently one of SNCF Réseau's main customers in terms of French rail network infrastructure fees.

Furthermore, until the rail reform, SNCF carried out delegated rail infrastructure management services on behalf of SNCF Réseau. From 1 July 2015, the delegated management fees paid to SNCF Mobilités (formerly SNCF) was replaced by internal operating and investment expenses.

Balance sheet headings	31 December 2017	31 December 2016
Operating receivables	712	759
Operating payables*	782	726
Income and expenses	31 December 2017	31 December 2016
Infrastructure fees	3,568	3,502
Expenses	-565	-513

* Balance sheet headings excluding borrowings presented separately in balance sheet liabilities

Relations with SNCF

Under the rail reform law, the new SNCF is responsible for the strategic control of the Public Rail Group as well as the shared functions carried out for all the Group EPICs, with regard to the Group's coordination, support and shared service centre departments. These shared functions include:

 Administrative management of human resources, payroll and social security protection;

- Management of the Group's information systems;

SNCF Réseau recognised a tax gain of ${\rm \xi106}$ million, which breaks down as follows:

- Competitiveness and Employment Tax Credit for ${\notin}100 \text{ million}$
- Research Tax Credit for €4 million
- Sponsorship Credit and Apprenticeship Tax Credit for €2 million.
- Management of the Group's real estate and property;
- Organisation of the Group's general purchases.

Balance sheet headings	31 December 2017	31 December 2016
Receivables	80	35
Payables	62	63
Income and expenses	31 December 2017	31 December 2016
Income and expenses	31 December 2017 74	31 December 2016 66

7.2 RELATIONS WITH THE FRENCH STATE

Pursuant to the legislation applicable to companies whose sole shareholder is the French State, SNCF Réseau is subject to the economic and financial supervision of the French State, the French Court of Auditors, the French Parliament, as well as the verifications of the French General Inspectorate of Finance.

SNCF Réseau invoices the French State for the access fees related to TER regional passenger trains and Trains d'Equilibre de Territoire (TET).

The French State also pays out operating and investment grants to SNCF Réseau.

The government aid granted to SNCF Réseau by the French State and local authorities is presented in the following table:

Balance sheet headings	31 December 2017	31 December 2016
Grants receivable (assets)	409	559
Income and expenses	31 December 2017	31 December 2016
Income and expenses Access fees	31 December 2017 1,820	31 December 2016 1,831

7.3 TRANSACTIONS AND COMMITMENTS WITH EXECUTIVES

	31 December 2017	31 December 2016		
Member of management bodies				
Loans and advances	-	-		
Allocated compensation	3	3		
Pension commitments	-	-		
Total	3	3		

8 OFF-BALANCE SHEET COMMITMENTS

8.1 COMMITMENTS GIVEN AND RECEIVED INVOLVING FINANCIAL INSTRUMENTS

SNCF Réseau is exposed to market risk in connection with the management of its debt. Based on an analysis of its general risk exposure, mainly regarding foreign exchange and interest rate fluctuations, it uses a variety of financial instruments within the limits set by the Board of directors to hedge against interest rate and currency risks and limit its financing costs.

- Long-term debt management:
 - Allocation between fixed-rate, floating-rate and inflation-indexed debt:

SNCF Réseau manages a structural fixed-rate/floatingrate/inflation-indexed rate position in euros to reduce borrowing costs, using interest rate swaps and swaptions, within the limits set by the Board of directors.

• Management of signature and counterparty risks:

SNCF Réseau is exposed to counterparty risk in connection with its cash investments and the subscription of derivatives from its financial partners, insofar as the debtor refuses to honour all or part of its commitment or does not have the means to respect it. To manage and limit this risk, investment instruments and derivatives are only entered into with financial institutions corresponding to the credit rating and equity criteria validated by the SNCF Réseau Board of directors.

A limited commitment amount by institution is determined according to these criteria.

Compliance with the authorised threshold by counterparty is monitored on a daily basis.

To hedge counterparty risk, SNCF Réseau performs margin calls with its financial counterparties whose rating is lower than the threshold defined by the Board of directors. Collateral (in cash only) is called up in the amount of the market value of the financial instrument portfolios for each counterparty whom SNCF Réseau is at risk.

Notional amount of derivative instruments:

The contracts or notional amounts presented below do not constitute the amounts payable or receivable and consequently do not represent the risk to which SNCF Réseau is exposed through its use of derivatives:

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		31 Decer	nber 2	2017	31 Decembe	r 2016
I - FINANCIAL INSTRUMENT FUTURES MARKET		Nominal		MtM	Nominal	MtM
Over-the-counter hedging transactions:						
EUR swaps:						
Micro-hedge					-	
	< 1 year	- EUR		- EUR	381 EUR	3 EUR
	1 to 5 years	622 EUR		-17 EUR	472 EUR	-58 EUR
	> 5 years	3,782 EUR		-390 EUR	3,524 EUR	-481 EUR
Macro-hedge						
	< 1 year	-	-	- EUR	- EUR	- EUR
	1 to 5 years	-	-	- EUR	- EUR	- EUR
	> 5 years	-	-	- EUR	- EUR	- EUR
Trading transactions						
	< 1 year	- EUR		- EUR	- EUR	- EUR
	1 to 5 years	- EUR		- EUR	- EUR	- EUR
	> 5 years	50 EUR		-3 EUR	50 EUR	-4 EUR

		31 Decembe	er 2017	31 December	2016
II - FOREIGN CURRENCY TRANSACTIONS		Nominal	MtM	Nominal	MtM
Over-the-counter hedging transactions:					
EUR forward contracts:					
	< 1 year	1,943 USD	-51 EUR	1,562 USD	75 EUR
	1 to 5 years				
	> 5 years				
EUR currency swaps:					
	< 1 year	100 CHF	18 EUR	- CHF	- EUR
		- USD	- EUR	100 USD	20 EUR
	1 to 5 years	990 CHF	256 EUR	1,090 CHF	400 EUR
		800 GBP	-248 EUR	800 GBP	-190 EUR
		32,000 JPY	4 EUR	25,000 JPY	8 EUR
		2,500 USD	-100 EUR	1,000 USD	46 EUR
	> 5 years	90 AUD	-5 EUR	- AUD	- EUR
		277 CAD	39 EUR	277 CAD	59 EUR
		855 CHF	238 EUR	855 CHF	359 EUR
		2,805 GBP	-923 EUR	2,795 GBP	-1,047 EUR
		937 HKD	-10 EUR	- HKD	- EUR
		23,000 JPY	-18 EUR	20,000 JPY	27 EUR
		500 NOK	-7 EUR	500 NOK	-1 EUR
		2,290 SEK	-11 EUR	- SEK	- EUR
		120 USD	4 EUR	120 USD	13 EUR

III - OTHER OFF-BALANCE SHEET COMMITMENTS	31 December 2017	31 December 2016
Financing commitments received: Syndicated Ioan:	1,500 EUR	1,250 EUR

SNCF Réseau also has a 5-year €1.5 billion syndicated credit facility, which expires on 29 June 2022. This credit facility was not used in 2017.

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8.2 OTHER COMMITMENTS GIVEN AND RECEIVED

Guarantees received from external third parties

Financial guarantees received from third parties amounted to €480 million and break down as follows:

- Guarantees received from suppliers (€454 million)
- Guarantees received from customers (€26 million)
- Purchase commitments

Purchase commitments mainly involve fixed asset purchase commitments in the amount of €70 million as at 31 December 2017.

• <u>Financial guarantees given to third parties</u>

Financial guarantees given to third parties amounted to €760 million as at 31 December 2017.

A guarantee was issued by SNCF Réseau for the Caisse des Dépôts-Savings Account fund management in the amount of €757 million. This guarantee has borne interest since July 2011.

Under new railway line construction projects, certain work may be outsourced to certain suppliers who themselves subcontract to other companies. Financial guarantees given amounted to \notin 3 million as at 31 December 2017.

This mainly involves guarantees given for €1.5 million to the SNCF corporate foundation and €1 million to VOSSLOH in connection with the Southern Europe Atlantic (SEA) high-speed line construction project.

Finance and operating leases

Lease commitments totalled €256 million as at December 2017 and break down as follows:

- Transport equipment operating lease: €42 million

Operating lease - rail equipment: €25 million

Real estate operating lease: €187 million

Equipment operating lease: €2 million

Sales undertakings

Sales undertakings received amounted to \notin 58 million as at 31 December 2017.

Sales undertakings given amounted to €58 million as at 31 December 2017.

• <u>Commitments received on property operating leases</u>

The indexation adopted as at 31 December 2017 for future concession payments was 1.12 %.

As at 31 December 2017, total commitments received under operating leases was estimated at \notin 2 million.

Property leases given

The indexation adopted as at 31 December 2017 for future concession payments was 0.112 %.

As at 31 December 2017, total commitments given under operating leases was estimated at ${\rm \in}187$ million.

• Financial guarantees received from third parties

SNCF Réseau has a first-demand guarantee from a banking institution in the event of a breach of contract by SYNERAIL. This guarantee was granted gradually according to the progress of the network deployment phases. As at 31

December 2017, SNCF Réseau benefited from a guarantee amounting to ${\bf \xi}480$ million.

SNCF Réseau receives financial guarantees from third parties, in particular a first-demand guarantee from a banking institution in the amount of \notin 3 million with regard to the annual fees owed for the use of branch line terminal installations by its main debtor, SAS Ciments Calcia.

SNCF Réseau receives a financial guarantee from Eiffage Rail Express in the amount of €140 million.

SNCF Réseau receives a financial guarantee from OCVIA in the amount of ${\ensuremath{\varepsilonl}122}$ million.

Track reservation

The Document de Référence du Réseau for 2017, which can be consulted at the SNCF Réseau website, provides for a new reciprocal compensation mechanism should track allocations or reservations be cancelled or significantly modified by either party.

The applicable penalties will now range between 0.5/tr/km and 8/tr/km according to variable terms between the cancellation or modification date and the track reservation date. They are more significant for SNCF Réseau than for the railway undertakings.

The amounts to be reported in off-balance sheet commitments must reflect the objective reality of the transactions that could impact the company's accounts in the future.

In this case, in the absence of a history and sufficient perspective to reliably measure the impacts arising from this new mechanism, no amount has been reported in off-balance sheet commitments given or received with respect to these penalties in the accounts for the year ended 31 December 2017.

Contract early termination clauses:

The concession agreement comprises several early termination clauses under which SNCF Réseau pays compensation to the concession holder and replaces the latter in the performance of the contract.

Forfeiture clause:

Under the agreement, the concession grantor may claim forfeiture should the concession holder breach the agreement terms, in which case SNCF Réseau should pay the concession grantor a minimum compensation corresponding to approximately 85% of the financing borne by the concession holder.

Cancellation clause for force majeure or unforeseeable events:

SNCF Réseau should pay the concession holder a fixed compensation under the terms and principles set out in the jurisprudence of the French Council of State (Conseil d'Etat).

In the event of such early termination, the financing agreement stipulates that the French State will reimburse SNCF Réseau for the amount of the compensation due to the concession holder, less the value of future revenues that will be realised by SNCF Réseau from the infrastructure whose management reassumes it. Cancellation clause to protect the public interest:

This mechanism can be implemented from the 12th year following commercial operations, in which case SNCF Réseau pays the concession holder compensation, a portion of which every six months.

The financing agreement stipulates that the public entity at the source of the decision triggering the clause shall pay the compensation.

9 INFORMATION ON EMPLOYEES

SNCF Réseau employees break down by category as follows:

	31 December 2017	31 December 2016
Executives	14,694	14,300
Supervisors	21,001	21,044
Labourers	21,997	22,400
Total average number of paid employees	57,692	57,744

10 MANAGEMENT COMPENSATION

The Group's key management personnel are members of the SNCF Réseau Group Executive Committee. Their cumulative taxable compensation indicated below corresponds to short-term benefits.

	31/12/2017	31/12/2016	Change
Average number of managers	11	10	1
Gross taxable income in K€	3,059	3,115	-56
Net taxable income	2,552	2,617	-65
In-kind benefits in K€	38	29	9

The amounts shown correspond to gross compensation (in 2016 they corresponded to net compensation).

06 – STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

PricewaterhouseCoopers Audit

ERNST & YOUNG Audit

SNCF Réseau

Statutory Auditors' report on the consolidated financial statements For the year ended 31 December 2017 PricewaterhouseCoopers Audit 63, rue de Villiers 92208 Neuilly-sur-Seine Cedex ERNST & YOUNG Audit Tour First TSA 14444 92037 Paris-La Défense Cedex

SNCF Réseau

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Statutory Auditors' report on the consolidated financial statements For the year ended 31 December 2017

Qualified opinion

In compliance with the engagement entrusted to us on 27 April 2015 by the French Minister for the Economy, Industry and Digital Affairs, we have audited the accompanying consolidated financial statements of SNCF Réseau for the year ended 31 December 2017.

Subject to the qualification described in the "Basis of the qualified audit opinion" section of our report, in our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at 31 December 2017 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit, Accounts and Risk Committee.

Basis of the qualified audit opinion

Reason for issuing a qualified opinion

As stated in Note 4.5 to the consolidated financial statements concerning the test of the value of infrastructure CGU assets, on 31 December 2015 SNCF Réseau carried out an impairment test which led to recognition of an

impairment loss of \notin 9.6 billion. In connection with the approval of the performance agreement by the Board of Directors on 20 December 2016, SNCF Réseau had identified indications of changes in the value of these assets and had consequently implemented at the end of the 2016 financial year i) an impairment test of its property, plant and equipment and intangible assets and ii) a separate evaluation of its deferred tax assets in accordance with prescriptive requirements, both of which based on assumptions taking into account the specific nature of SNCF Réseau's business and serving to confirm the network's economic value.

At 31 December 2017, the discontinuation of the CICE tax credit as well as the changes in employer and employee contributions included in the French finance laws (*lois de finance*) and the French social security financing law (*loi de financement de la sécurité sociale*) for 2018 constituted indications of a change in value. A new impairment test and new deferred tax asset evaluation were therefore carried out, applying the same methodology as that of the test carried out at 31 December 2016.

For the railway network currently in service, 2030 was thus chosen as a standard year since the Company considers it to be the year that the network will be stabilised at expected performance levels. The cash flow projections, based on the 10-year financial trajectory of the performance agreement between the Company and the French State, incorporate (i) cash inflows (infrastructure fees, access charges and investment subsidies) which improve significantly over time and are mainly generated from commitments received from the French State, and (ii) expenses (installation work and maintenance) and capital investment in renovations and renewals in connection with the Company's significant productivity goals.

The evaluations carried out support the carrying amounts presented for property, plant and equipment and intangible assets after deducting the impairment loss of \notin 9.6 billion, as well as an amount of \notin 3.5 billion in deferred tax assets. These amounts reflect the balance reached during negotiations between the Company and the French State and incorporated in the performance agreement. This balance is based on the assumptions that (i) the State will effectively implement all means and commitments required to support the recoverable amounts calculated using the approach detailed above and (ii) the Company is capable of achieving its productivity goals. The terminal value, which represents 95% of the assets' value in use, is based on a renovated, operational railway network that cannot be compared to any corresponding historical situation.

There are therefore major risks and uncertainties involved in the assumptions used to assess the property, plant and equipment, intangible assets and deferred tax assets and consequently the amount of the related impairment loss could increase significantly.

As a result, we are unable to assess the reliability of these projections and are therefore unable to give an opinion on the net value of the assets concerned, which after impairment amounted to \notin 33.7 billion at 31 December 2017 for property, plant and equipment and intangible assets and \notin 3.5 billion for deferred tax assets.

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Responsibilities of the Statutory Auditors* relating to the audit of the consolidated financial statements section of our report.

■ Independence

We conducted our audit engagement in compliance with the independence rules applicable to us for the period from 1 January 2017 to the date of our report and in particular we did not provide any non-audit services prohibited by article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics (*Code de déontologie*) for Statutory Auditors.

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, apart from the matter described in the "Basis of the qualified opinion" section, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were of most significance in our audit of the consolidated financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the consolidated financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the consolidated financial statements.

Evaluation of employee benefit obligations

Key audit matter	SNCF Réseau Group employees benefit from various post-employment benefit plans which are treated, where appropriate on the basis of legal analyses, as either defined-benefit or defined-contribution plans.		
	Defined-benefit plans result in the recognition of provisions for the corresponding obligations, amounting to a net value of €923 million at 31 December 2017. These defined-benefit obligations primarily concern:		
	- post-employment benefit plans, social benefits and work-related accident pensions;		
	- other long-term benefit plans such as jubilees and similar benefits, and phased-in retirement.		
	As indicated in Note 6.3 to the consolidated financial statements, these obligations are mainly evaluated by independent experts on the basis of actuarial calculations incorporating financial and demographic assumptions such as the discount rate, life expectancy, staff turnover and projected future salary increases.		
	For employees with SNCF qualifying status, since the creation of the SNCF employee pension and provident fund (<i>Caisse autonome de Prévoyance et de Retraite du Personnel de SNCF</i>), the Company has concluded that the special pension scheme is a defined-contribution plan, as described in Note 6.3 to the consolidated financial statements. In such a plan, the obligations do not result in a liability entry as the Company's commitments to its employees do not go beyond the contributions paid each year.		
	Given the complexity of the plans and of determining how to categorise them, the number of employee benefit plans within the Group and the materiality of the associated provisions, the complexity of the actuarial calculations carried out, the degree of uncertainty in relation to the underlying financial and demographic assumptions, as well as the high degree of sensitivity of the actuarial value of the commitments to these assumptions, we deemed management's estimate of the value of the commitments to be a key audit matter.		
How our audit addressed this risk	We have reviewed management's procedures for categorising and evaluating its main obligations.		
	Our work also consisted in:		
	 obtaining and examining internal and external documentation relating to these obligations, including the records of assets covering these obligations; assessing, on the basis of analyses performed by management: 		
	 the accounting treatment of new plans, as either defined-benefit plans or defined-contribution plans, 		
	• the potential impact of developments and events during the year on the		

accounting treatment of existing plans, particularly changes in the rate of contributions and appeals to the French Council of State (*Conseil d'Etat*);

- verifying, on a sample basis, the basic data taken into account in the actuarial calculations against the underlying accounting data;
- assessing with our actuarial experts the validity of the main actuarial assumptions used in the evaluation of commitments, according to the nature of the commitments, their duration and the available market data (discount rate, inflation rate, life expectancy, staff turnover rate and projected future salary increases);
- verifying the compliance of the evaluation and accounting principles and methods applied in relation to current contractual, legal, regulatory and collectively-negotiated requirements.

Lastly, we also verified that Notes 4.7.1 and 6 to the consolidated financial statements provide appropriate disclosures, particularly concerning the accounting treatment of certain obligations, the description of the pending appeal and the sensitivity of the value of the obligations to the assumptions applied.

Verification of the information pertaining to the Group presented in the management report

As required by law and in accordance with professional standards applicable in France, we have also verified the information pertaining to the Group presented in the management report of the Board of Directors.

With the exception of the potential impact of the matter set out in the "Basis of the qualified audit opinion" section of this report, we have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

Report on other legal and regulatory requirements

■ Appointment of the Statutory Auditors

We were appointed Statutory Auditors of SNCF Réseau by the French Minister for the Economy and Finance in 1997 for PricewaterhouseCoopers Audit and the French Minister for the Economy, Industry and Digital Affairs in 2015 for Ernst & Young Audit.

As at 31 December 2017, PricewaterhouseCoopers Audit and Ernst & Young Audit were in the twenty-first year and the third year of total uninterrupted engagement, respectively.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for preparing consolidated financial statements presenting a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and for implementing the internal control procedures it deems necessary for the preparation of consolidated financial statements free of material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it expects to liquidate the company or to cease operations.

The Audit, Accounts and Risk Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements

■ Objective and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. 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 economic decisions of users taken on the basis of these consolidated financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of management of your Company.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit. They also:

- ► Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their 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.
- ► Obtain 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 internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the consolidated financial statements.
- ► Assess 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. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion.
- Evaluate the overall presentation of the consolidated financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the company to express an opinion on the consolidated financial statements. The Statutory Auditors are responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed thereon.

■ Report to the Audit, Account and Risk Committee

We submit a report to the Audit, Account and Risk Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Audit, Accounts and Risk Committee includes the risks of material misstatement that, in our professional judgement, were of most significance in the audit of the consolidated financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Audit, Accounts and Risk Committee with the declaration provided for in article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Audit, Accounts and Risk Committee.

Neuilly-sur-Seine and Paris La Défense, 22 February 2018

The Statutory Auditors

PricewaterhouseCoopers Audit

ERNST & YOUNG Audit

Philippe Vincent

Christine Vitrac

Denis Thibon

07 – STATUTORY AUDITORS' REPORT ON THE FINANCIAL STATEMENTS

PricewaterhouseCoopers Audit

ERNST & YOUNG Audit

SNCF Réseau

Statutory Auditors' report on the financial statements For the year ended 31 December 2017 PricewaterhouseCoopers Audit 63, rue de Villiers 92208 Neuilly-sur-Seine Cedex ERNST & YOUNG Audit Tour First TSA 14444 92037 Paris-La Défense Cedex

SNCF Réseau

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Statutory Auditors' report on the financial statements For the year ended 31 December 2017

Qualified opinion

In compliance with the engagement entrusted to us on 27 April 2015 by the French Minister for the Economy, Industry and Digital Affairs, we have audited the accompanying financial statements of SNCF Réseau for the year ended 31 December 2017.

Subject to the qualification described in the "Basis of the qualified audit opinion" section of our report, in our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company at 31 December 2017 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit, Accounts and Risk Committee.

Basis of the qualified audit opinion

■ Reason for issuing a qualified opinion

As stated in Note 4.2.3 to the financial statements concerning the test of the value of infrastructure CGU assets, on 31 December 2015 SNCF Réseau carried out an impairment test which led to recognition of an impairment loss of €9.6 billion. In connection with the approval of the performance agreement by the Board of Directors on 20 December 2016, SNCF Réseau had identified indications of changes in the value of these assets and had consequently implemented at the end of the 2016 financial year an impairment test of its property, plant and equipment and intangible assets based on assumptions taking into account the specific nature of SNCF Réseau's business and serving to confirm the network's economic value. At 31 December 2017, the discontinuation of the

CICE tax credit as well as the changes in employer and employee contributions included in the French finance laws (*lois de finance*) and the French social security financing law (*loi de financement de la sécurité sociale*) for 2018 constituted indications of a change in value. A new test was therefore carried out, applying the same methodology as that of the test carried out at 31 December 2016.

For the railway network currently in service, 2030 was thus chosen as a standard year since the Company considers it to be the year that the network will be stabilised at expected performance levels. The cash flow projections, based on the 10-year financial trajectory of the performance agreement between the Company and the French State, incorporate (i) cash inflows (infrastructure fees, access charges and investment subsidies) which improve significantly over time and are mainly generated from commitments received from the French State, and (ii) expenses (installation work and maintenance) and capital investment in renovations and renewals in connection with the Company's significant productivity goals.

The evaluations carried out support the carrying amounts presented for property, plant and equipment and intangible assets after deducting the impairment loss of €9.6 billion recognised at 31 December 2017. This amount reflects the balance reached during negotiations between the Company and the French State and incorporated in the performance agreement. This balance is based on the assumptions that (i) the State will effectively implement all means and commitments required to support the recoverable amounts calculated using the approach detailed above and (ii) the Company is capable of achieving its productivity goals. The terminal value, which represents 95% of the assets' value in use, is based on a renovated, operational railway network that cannot be compared to any corresponding historical situation.

There are therefore major risks and uncertainties involved in the assumptions used to assess the property, plant and equipment and intangible assets, and consequently the amount of the related impairment loss could increase significantly.

As a result, we are unable to assess the reliability of these projections and are therefore unable to give an opinion on the net value of the assets concerned, which after impairment amounted to \notin 33.7 billion at 31 December 2017.

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the financial statements" section of our report.

■ Independence

We conducted our audit engagement in compliance with the independence rules applicable to us for the period from 1 January 2017 to the date of our report and in particular we did not provide any non-audit services prohibited by article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics (*Code de déontologie*) for Statutory Auditors.

Emphasis of matter

Without qualifying our opinion as expressed above, we draw your attention to Note 3 to the financial statements, which describes the change in accounting method relating to the first-time application of ANC Regulation 2015-05 the accounting treatment of forward financial instruments and hedging operations.

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, apart from the matter described in the "Basis of the qualified opinion" section, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were of most significance in our audit of the financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the financial statements.

Evaluation of employee benefit obligations

Key audit matter	SNCF Réseau Group employees benefit from various post-employment benefit plans which are treated, where appropriate on the basis of legal analyses, as either defined-benefit or defined-contribution plans.
	Defined-benefit plans result in the recognition of provisions for the corresponding obligations, amounting to a net value of €923 million at 31 December 2017. These defined-benefit obligations primarily concern:
	- post-employment benefit plans, social benefits and work-related accident pensions;
	- other long-term benefit plans such as jubilees and similar benefits, and phased-in retirement.
	As indicated in Note 3.9.3 to the financial statements, these obligations are mainly evaluated by independent experts on the basis of actuarial calculations incorporating financial and demographic assumptions such as the discount rate, life expectancy, staff turnover and projected future salary increases.
	For employees with SNCF qualifying status, since the creation of the SNCF employee pension and provident fund (<i>Caisse autonome de Prévoyance et de Retraite du Personnel de SNCF</i>), the Company has concluded that the special pension scheme is a defined-contribution plan, as described in Note 3.9.3 to the financial statements. In such a plan, the obligations do not result in a liability entry as the Company's commitments to its employees do not go beyond the contributions paid each year.
	Given the complexity of the plans and of determining how to categorise them, the number of employee benefit plans within the Group and the materiality of the associated provisions, the complexity of the actuarial calculations carried out, the degree of uncertainty in relation to the underlying financial and demographic assumptions, as well as the high degree of sensitivity of the actuarial value of the commitments to these assumptions, we deemed management's estimate of the value of the commitments to be a key audit matter.
	We have reviewed management's procedures for categorising and evaluating its main obligations.
How our audit addressed this risk	Our work also consisted in:
	- obtaining and examining internal and external documentation relating to these obligations, including the records of assets covering these obligations;
	- assessing, on the basis of analyses performed by management:
	 the accounting treatment of new plans, as either defined-benefit plans or defined-contribution plans,
	• the potential impact of developments and events during the year on the

accounting treatment of existing plans, particularly changes in the rate of contributions and appeals to the French Council of State (*Conseil d'Etat*);

- verifying, on a sample basis, the basic data taken into account in the actuarial calculations against the underlying accounting data;
- assessing with our actuarial experts the validity of the main actuarial assumptions used in the evaluation of commitments, according to the nature of the commitments, their duration and the available market data (discount rate, inflation rate, life expectancy, staff turnover rate and projected future salary increases);
- verifying the compliance of the evaluation and accounting principles and methods applied in relation to current contractual, legal, regulatory and collectively-negotiated requirements.

Lastly, we also verified that Notes 3.9.3 and 4.12 to the financial statements provide appropriate disclosures, particularly concerning the accounting treatment of certain obligations, the description of the pending appeal and the sensitivity of the value of the obligations to the assumptions applied.

Verification of the management report

In accordance with professional standards applicable in France, we have also performed the specific verifications required by French law.

With the exception of the potential impact of the matter set out in the "Basis of the qualified audit opinion" section of this report, we have no matters to report as to its fair presentation and its consistency with the financial statements of the information given in the management report of the Board of Directors.

Report on other legal and regulatory requirements

■ Appointment of the Statutory Auditors

We were appointed Statutory Auditors of SNCF Réseau by the French Minister for the Economy and Finance in 1997 for PricewaterhouseCoopers Audit and the French Minister for the Economy, Industry and Digital Affairs in 2015 for Ernst & Young Audit.

As at 31 December 2017, PricewaterhouseCoopers Audit and Ernst & Young Audit were in the twenty-first year and the third year of total uninterrupted engagement, respectively.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for preparing financial statements presenting a true and fair view in accordance with French accounting principles, and for implementing the internal control procedures it deems necessary for the preparation of financial statements free of material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it expects to liquidate the company or to cease operations.

The Audit, Accounts and Risk Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the financial statements

■ Objective and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. 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 economic decisions of users taken on the basis of these financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of management of your Company.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit. They also:

- ► Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their 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.
- ► Obtain 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 internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the financial statements.
- ► Assess 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. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion.
- Evaluate the overall presentation of the financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

■ Report to the Audit, Account and Risk Committee

We submit a report to the Audit, Account and Risk Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Audit, Accounts and Risk Committee includes the risks of material misstatement that, in our professional judgement, were of most significance in the audit of the financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Audit, Accounts and Risk Committee with the declaration provided for in article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Audit, Accounts and Risk Committee.

Neuilly-sur-Seine and Paris La Défense, 22 February 2018

The Statutory Auditors

PricewaterhouseCoopers Audit

ERNST & YOUNG Audit

Philippe Vincent

Christine Vitrac

Denis Thibon