

31 December 2018

# SNCF RÉSEAU GROUP FINANCIAL REPORT

In € millions

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





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01 –  
MANAGEMENT  
STATEMENT  
FINANCIAL  
REPORT



## MANAGEMENT STATEMENT ON THE FINANCIAL REPORT

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 2018 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 2019

Patrick JEANTET

Chairman

Hugues DE NICOLAY

Deputy Chief Executive Officer,  
Finance & Purchasing

02 –  
INTEGRATED  
MANAGEMENT  
REPORT  
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 RAISON D'ÊTRE: ENSURING FREEDOM OF MOVEMENT FOR ALL WHILE PRESERVING THE PLANET

Fiscal 2018 will be remembered for two major events that will shape the future of SNCF Réseau: Parliament's passing of the national railway pact on 27 June, and the launch of Nouvel'R on 12 July.

The measures of the new national railway pact are of great weight and historical importance for SNCF Réseau and have been long-awaited:

- absorption of a €35 billion debt load in two phases: €20 billion in 2020 and €15 billion in 2022, which will save €1 billion in finance costs and free SNCF Réseau of this debt;
- greater resources to modernise the network, with €200 million each year beginning in 2022;
- the transfer of Gares & Connexions to SNCF Réseau, via a subsidiary, in line with ever more effective station management;
- the transformation of SNCF Réseau into a State-owned company, which will provide a more versatile and transparent governance.

These measures will profoundly change our horizon. From infrastructure manager, SNCF Réseau is now set to become the "pivot" in the French rail system. Alongside the organising authorities and rail companies, who will continue to control their transport plans and commercial relations, SNCF Réseau will in effect be the sole sector player with a global vision and the levers necessary to act: management of rail and station infrastructures, sound balance sheet, greater resources and, above all, the role of network architect.

The new railway pact will also rely on a labour framework in full transformation, one that is both competitive for the company and attractive to railway employees.

In an environment that will soon open to competition, these changes will mean greater efficiency for SNCF Réseau, following the lead of Nouvel'R, our new strategic plan.

This corporate plan is founded on three SNCF Réseau values endorsed by the new Executive Committee, namely: cooperation, accountability and openness. It conveys the company's strategic vision: prepare the High-Performance Network of tomorrow, to circulate more trains with greater reliability to naturally welcome more customers!

The Nouvel'R roll-out in 2018 brought with it a new and more transversal organisation, so that our strategy is customer-focused.

In terms of operations, in 2018 SNCF Réseau stepped up its modernisation effort for the network with the greatest traffic volume, thanks to investments that rose by 5% compared to 2017 (excluding major projects under public-private partnerships). Thus, nearly 1,700 projects were successfully completed last year, 70% of which at night to limit disruptions for the 15,000 trains that run daily.

These works often resulted in major commissionings. Among the most significant are:

- the new Saint-Denis Network Operations Centralised Command, commissioned on 20 October 2018 to oversee 1,300 daily trains from Gare du Nord, representing 10% of French rail traffic;
- the reopening of the Belfort-Delle line on 9 December 2018, which had been closed since 1992, which improves accessibility to the Belfort station and increases the rail share of cross-border travel;
- the new Marly viaduct deck, replacing the original wrought-iron deck of 1883.

Despite these advances, 2018 also had its share of setbacks. SNCF Réseau had to deal with the spring strike and the fire at the Vanves RTE station, which blocked the Gare Montparnasse for a few days in midsummer. Thanks to the involvement of personnel, customer service was maintained, and real progress was made in terms of passenger information.

Despite an activity that was particularly intense, I wish to emphasize the joint effort that reduced major safety incidents by 14% compared to 2017, thus confirming the positive results obtained in recent years.

In financial terms, company earnings were impacted by the strike, for €226 million, and the settlement of previous litigations. The judicious management of SNCF Réseau costs nevertheless limited these impacts on net profit. In the absence of these impacts, gross profit would have remained stable in relation to 2017.

To accompany the ambitions of SNCF Réseau, we have committed to a corporate social responsibility policy founded on four major challenges: rail system safety, ecological footprint, social performance, and the strengthening of our regional base.

I strongly believe that a public company such as ours must shoulder great responsibility vis-a-vis its stakeholders. By way of example, we created a national stakeholders' committee this year. This policy will support the transformation now underway in the company, and also meet the environmental and social challenges we face.

As a pivotal player in the rail system, SNCF Réseau is at the heart of the SNCF Group's new raison d'être: "Ensuring freedom of movement for all while preserving the planet".

This raison d'être, which represents both a commitment and a challenge, will dictate the ambitions of SNCF Réseau for the next 10 years:

- make gains on all fronts, including service quality, system reliability and operational strength, particularly in the major rail hubs;
- further develop traffic for our current customers and attract new ones;
- improve economic performance so that rail, environmentally friendly by nature, gains market shares from other transport modes.

We're on the right path. Let's stay on course!

# BUSINESS MODEL SNCF RÉSEAU 2018

Figures given for illustration purposes; data is non-exhaustive.

## RESOURCES

### EMPLOYEES

**54,097** employees\*



### ASSETS

#### TANGIBLE ASSETS

**30,000** km of railway lines  
**103,000** ha of rights-of-way  
**95** production facilities  
**580\*\*** electricity substations  
**2,200** switching stations  
**8** operational centralised network control rooms



#### INTANGIBLE ASSETS

Know-how, expertise, client relations, processes, innovation, digital, data

### PURCHASING

**€5.7** billion in purchases and external costs



#### MATERIALS

**1.8** million sleepers  
**177,650**t of rails  
**1.87**mt of ballast

#### ENERGY

**390,5**GWh of electricity for buildings  
**28,3** million litres of fuel  
**142**GWh of gas

## ASSET MANAGEMENT

### OPERATIONS

**15,000** commercial trains operating daily on the network



### MARKETING

**20,000** train paths delivered per day

### INSPECTIONS

**233,600\*\*** km of track automatically inspected (by Iris & Surveillance trains)  
**4** remote network inspection centres



### MAINTENANCE AND MODERNISATION

**€2 725** million invested in renewal and performance under the performance contract  
**835** km of tracks replaced  
**115\*\*** computerised switching stations in service



### DEVELOPMENT

**€1,631** million invested in development projects



## MISSION

**GIVE EVERYONE  
THE FREEDOM TO  
TRAVEL EASILY WHILE  
ALSO PROTECTING  
THE PLANET**

## SHARED VALUES

### CLIENTS

**42** clients  
**250,000**t of goods transported per day  
**5** million passengers per day on the network  
**5** rail motorways



### SUPPLIERS

**€5.7** billion in purchases  
**25 to 30%** of purchases made from SMEs



### INVESTORS

**€2,3** billion in loan issues  
**€2,7** billion in Green Bonds issued since 2016



### EMPLOYEES

**2,079** new recruits  
**2,401,000** hours of training  
**€2,331** million in salaries paid



### CIVIL SOCIETY AND REGIONS

**23,800** towns crossed by a railway line  
**59** management agreements with natural-site managers  
**€13,5** million in inclusive purchasing (back-to-work and sheltered sector)  
**11** consultations  
**718** homes in noise black spots have been treated



### PLANÈTE

**10.9**mt CO<sub>2</sub> equivalent of greenhouse gas emissions saved by opting for rail



\*Actual headcount.  
 \*\*2017 figures.

## 1. SNCF RÉSEAU IN 2018

### 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 km of high-speed lines. It also manages customer access to network and service infrastructures under transparent and non-discriminatory conditions: 27 railway companies running on the Network and 15 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.

In July 2018, SNCF Réseau carried out a reorganisation, becoming more transversal and customer-focused. The reorganisation was structured according to major strategic tasks with **three Control Departments** (Strategy, Scheduling & Contracting Authority, Industrial & Engineering and System Operations), **three Production Departments** (Customers & Services, Operations & Production and Ile-de-France) and **four Support Departments** (Safety, Security & Risks, Human Resources, Finance & Purchasing and Communication & Regional Dialogue).

## SNCF RÉSEAU

### Three Control Departments

Building the French national rail network's strategy and defining technical policies and tools.

### Three Production Departments

Planning and realisation of industrial and operational projects.

### Four Support Departments

Facilitating the activity's coordination and management.

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.

between Paris-Est station and Paris-Charles-de-Gaulle Airport.

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;
- ALTAMETRIS, a company specialising in the collection, processing and optimisation of data using automated mobile devices, 100% owned by SNCF Réseau.
- SNCF INFRA LBA DEVELOPPEMENT, a holding company 40% owned by SNCF Réseau and 60% owned by Le Bronze Alloys. It holds 5% of the joint venture XI'AN RAILWAYS TECHNOLOGY PARTNERS, which produces catenary parts for the Chinese market;
- LINEA FIGUERAS PERPIGNAN, a company equally owned by SNCF Réseau and ADIF, whose purpose is to carry out traffic and maintenance operations for the rail link between Figueras in Spain and Perpignan in France;
- IMMO RESEAU, a real estate holding company founded in April 2018 and 100% owned by SNCF Réseau, whose primary purpose is to invest in companies dedicated to property development and promotion, in order to assist in the valuation process. Along with SNCF Mobilités, it holds 50% of EFAC (Espaces Ferroviaires Aménagement Commun) and EFPC (Espaces Ferroviaires Promotion Commun);
- CDG Express Travaux, a company founded on 5 October 2018 and equally held by SNCF Réseau, the ADP Group and the Caisse des Dépôts et Consignations (CDC). It follows the CDG Express Etudes subsidiary and will be awarded a works concession agreement from the French State that will cover project ownership, financing, design, construction and delivery of the rail link project

### 1.2. CORPORATE STRATEGY

#### 1.2.1. New railway pact

The law for a new railway pact was published in the *Journal Officiel* on 28 June 2018. In authorising the government to legislate by decree, this law defines a new rail transport model in a market open to competition, while preserving the mandates of an efficient public service.

The new railway pact is based on several priorities:

- **change in legal status:** as of 1 January 2020, SNCF Réseau will become a public limited company with non-transferable capital, wholly owned by SNCF, a holding company in the form of a national publicly funded company, whose capital is also non-transferable;
- **enhanced performance of the new SNCF** by improving its industrial efficiency and cutting costs;
- **new trajectory in terms of investments**, including an additional €200 million yearly as from 2022 included in an amendment to the performance agreement;
- **change in status of railway employees** intended to end railway employee status in recruitment as of 1 January 2020 and forge a new and attractive company agreement;
- **successful opening to competition** for the infrastructure manager which will develop a number of French national rail network companies and change the relationship with the Transport Organising Authorities that depend on network data;
- **strengthening of the infrastructure manager** with the transfer of Gares & Connexions to SNCF Réseau, via a subsidiary.

In addition, on 25 May 2018, the French Prime Minister announced that the French State would absorb €35 billion in

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SNCF Réseau debt, of which €25 billion in January 2020, and €10 billion in 2022.

### 1.2.2. Transformation of SNCF Réseau: Nouvel'R project

The Nouvel'R corporate plan is part of the railway pact and sets out a 2030 strategy for SNCF Réseau: maximize infrastructure use by circulating more trains on the existing network, particularly for the major hubs and lines. Launched by Patrick Jeantet in September 2017 and implemented in July 2018, the plan is based on three identity pillars:

- a new **EXTENT**: re-appropriate the regions;
- a new **ATMOSPHERE**: in step with new mobility uses and needs;
- a new **ERA**: re-establish rail transport as a vital player in societal change.

The project consists in **formulating a 2030 strategic plan** based on six focal points:

- modernise the network with the greatest traffic as a priority;
- boost the capacity and solidity of saturated or potentially saturated lines and hubs;
- speed up the modernisation of operating and signalling systems;
- roll out a commercial policy that promotes the use of the rail network;
- continue to ensure safety and strengthen security;
- assist the company's employees with these new challenges.

### 1.2.3. Golden rule

The "Golden rule" ratio specifies the financing rules for SNCF Réseau investments and is defined as the ratio of net debt (period-end repayment amount) to IFRS gross profit for the period.

The provisions of Law no. 2018-515 of 27 June 2018 for a new railway pact, and Order no. 2018-1135 of 12 December 2018 amended Article L. 2111-10-1 of the French Transport Code, specifying the financing rules applicable to SNCF Réseau investments.

These new provisions give rise to two investment categories: development and renewal (modernisation now representing a development operation – even though the laws provide for specificities).

When analysed, the provisions identify three stages in the enactment of the new rules governing the financing terms of SNCF Réseau investments.

#### Until 1 January 2020:

The prior provisions will continue to apply. The debt / gross profit ratio is capped at 18. Maintenance investments are governed by the multi-year contract and specifically appendix 7.

As at 31 December 2018, the ratio stood at 31.06. It has risen under the combined effects of the increase in the net debt repayment amount (€2,736) million and the decline in gross profit (€344) million.

#### From 1 January 2020 to 31 December 2026:

The articles of association of the new national public limited company, to be approved before 31 December 2019, will set the convergence terms so that the ratio (debt to gross profit, defined based on the SNCF Réseau statutory scope) reaches the cap set in the articles of association no later than 31 December 2026. In addition, if the ratio has not attained the cap, the financing rules for SNCF Réseau investments must comply with the following principles:

- no financial investment for development projects unless they involve modernisation;
- for renewal or modernisation projects, the investment level will be determined by SNCF Réseau so that the return on the investment is at least equal to the weighted average cost of capital of SNCF Réseau for this same investment after consideration of the risks specific to the investment.

This cap is likely to be lowered when the French State absorbs a portion of the SNCF Réseau debt.

Should the ratio attain the cap before the set deadline, the post 1 January 2027 plan could be applied in advance.

#### As of 1 January 2027:

The rules governing the financing terms of SNCF Réseau investments will be established to control the debt, in compliance with the cap and based on the following principles:

- the investments supported by SNCF Réseau should not exceed the cap;
- for any renewal or development investment project for the French national rail network requested by the French State, regional authorities, or any other third party, SNCF Réseau will determine its contribution to the project's financing so that the return on the investment is at least equal to the weighted average cost of capital of SNCF Réseau for this same investment after consideration of the risks specific to the investment.

The terms and conditions governing the application of this law will be specified by Decree.

## 1.3. MAJOR EVENTS

### 1.3.1. First half strike

The first half of 2018 was marked by a major strike, in opposition to the planned reform of the rail system. The strike extended from 22 March 2018 to 7 July 2018, with two days of strike action every five days, for a total of 39 strike days.

The strike had significant impacts for SNCF Réseau, mainly due to the drop in traffic that decreased infrastructure fees. Production was also disrupted at various levels due to the disarray of several projects.

### 1.3.2. Reclassification of SNCF Réseau as a public administration (APU) as of 2016

In a press release published on 6 September 2018, and in agreement with Eurostat, the INSEE announced the reclassification of SNCF Réseau as a public administration (APU) as of 2016 for the October 2018 notification. This reclassification had an automatic impact on the deficit and public debt notified for fiscal years 2016 and 2017. The annual deficit of SNCF Réseau is now being monitored by the INSEE.

In 1997, Eurostat had endorsed the INSEE decision to classify RFF outside of the APU scope since its merchant revenues,

essentially comprising infrastructure fees paid by SNCF, covered more than 50% of its production costs.

Since then, the comparative dynamics of the merchant revenues and the production costs of RFF and subsequently SNCF Réseau have led to a gradual decrease in the share of production costs covered by merchant revenues, due to the company's growing debt and the major investments undertaken to renew the network or create new high-speed lines over the last decade.

### 1.3.3. Professional elections

From 16 to 22 November 2018, the Public Rail Group (PRG) employees elected members of the Labour and Economic Committees, the new employee representative bodies whose four-year mandate began on 1 January 2019.

These new bodies replace the former Works Committees, the Health, Safety and Working Conditions Committees, and the Personnel Delegations.

### 1.3.4. Audit of the French Anti-corruption Agency

The French Anti-corruption Agency (AFA) was created in December 2016. Pursuant to the announcements made on its creation, the Agency audited several State companies.

To this end, EPIC SNCF Réseau was audited by the AFA in February 2018. To measure the general anti-corruption organisation, 160 checkpoints were targeted, including whistle-blowing procedures, customer and supplier evaluations and accounting processes.

Since the month of June, some 50 persons have been interviewed by the AFA, including the Chairman and the Director of Human Resources.

SNCF Réseau is awaiting the audit's conclusions.

### 1.3.5. Audit of the AMF - French Financial Markets Authority

The financial reporting of SNCF Réseau was audited by the Autorité des Marchés Financiers (AMF) with respect to the financial statements for the periods ended 31 December 2017 and 30 June 2018. The questions mainly covered the impairment test, the recognition of Public-Private-Partnerships (PPP) and concessions, the nature and classification of financial instruments, and the implementation of the new IFRS 9, 15 and 16 standards. They occasionally led SNCF Réseau to make some minor adjustments to its financial statements.

### 1.3.6. Subsequent events

#### ARAFER opinion

ARAFER's opinion on fee pricing for the 2020 service timetable for regulated activities was not considered as an indication of impairment.

#### CDG Express

The decree approving the concession agreement for the CDG Express, a high-speed train linking Paris to Roissy airport in twenty minutes as from 2024 was published in the *Journal Officiel* on 16 February 2019.

On 11 February 2019, the French Transport Ministry announced the signing of the agreement with the infrastructure manager, a company equally held by ADP, SNCF Réseau and the Caisse des Dépôts.

## 1.4. FINANCIAL AND NON-FINANCIAL KEY FIGURES

In € millions	31 Dec.	31 Dec.	Change
	2018	2017*	In € millions
Revenue	6,301	6,464	-163
Gross profit	1,553	1,897	-344
Operating profit/(loss)	-2,773	1,100	-3,872
Finance cost	-1,241	-1,172	-69
Net profit/(loss) before tax	-4,013	-72	-3,941
Net profit/(loss) for the year attributable to equity holders of the parent	-4,784	-201	-4,583
Investments	5,057	5,378	-321
Net debt in IFRS	-49,590	-46,630	-2,960
Average number of full-time equivalent employees (FTE)	54,378	54,405	-27

\* Fiscal 2017 restated for the IFRS 15 impact and the reclassification of commercial compensation (€32 million) from Purchases and External Charges to Revenue

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 borrowings 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 regarding 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	31 Dec.	31 Dec.
	2018	2017
<b>Net profit/(loss) for the year attributable to equity holders of the parent</b>	<b>-4,784</b>	<b>-201</b>
Included in "Impairment loss"	3,400	-
Included in "Share of net profit/(loss) of companies consolidated under the equity method";	-	1
Included in "Other financial income and expenses" (restatement of exceptional financial income)	-	-85
Included in "Income tax expense"	771	129

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<b>Net profit/(loss) for the year attributable to equity holders of the parent</b>	<b>-613</b>	<b>-156</b>
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### Non-financial key figures

	<b>31 Dec. 2018</b>	<b>31 Dec. 2017</b>	<b>Change</b>	
Total number of hirings – excluding subsidiaries	2,079	2,832	-753	-27%
Percentage of women in total workforce (%)	12.9	12.6	0.3	2%
Number of noticeable safety incidents attributed to SNCF Réseau all causes combined	137	142	-5	-4%
Frequency index of work accidents with lost time excluding commuting (%)**	10.2	10.3	-0.1	-1%
Total greenhouse gas emissions of SNCF Réseau (scope 1+2) (kt eq CO <sub>2</sub> )**	167	170	-3	-2%
Tonnes of CO <sub>2</sub> avoided thanks to the rail system (kt eq CO <sub>2</sub> )**	10,880	9,872	1,008	10%

\*\* Mandatory publication of the Greenhouse Gas Emissions Report every three years (Article 75, Grenelle II law)

## 2. GROUP RESULTS AND FINANCIAL POSITION

### 2.1. CASH FLOW STATEMENT

In € millions	31 Dec. 2018	31 Dec. 2017	Change
<b>Cash from operations before net borrowing costs and taxes</b>	<b>1,559</b>	<b>1,894</b>	<b>-335</b>
Impact of change in working capital requirement	58	-80	138
Taxes paid (collected)	-5	1	-6
<b>Cash flow from operating activities</b>	<b>1,612</b>	<b>1,815</b>	<b>-203</b>
Purchases of intangible assets and property, plant and equipment	-4,851	-4,902	51
Capitalised borrowing costs	-222	-278	56
Disposals of intangible assets and property, plant and equipment	97	94	3
Changes in loans and advances	-230	-249	19
Investment grants received	2,046	2,350	-304
<b>Cash flow used in investing activities</b>	<b>-3,162</b>	<b>-2,985</b>	<b>-177</b>
Issue of debt instruments	2,277	4,878	-2,601
Borrowing repayments	-1,179	-1,386	207
Payments relating to PPP payables	-275	-63	-212
Receipts relating to PPP receivables	271	63	208
Net borrowing costs paid	-1,265	-1,165	-100
Change in cash liabilities	1,193	-1,026	2,219
<b>Cash flow from financing activities</b>	<b>1,024</b>	<b>1,301</b>	<b>-277</b>
<b>Increase (decrease) in cash and cash equivalents</b>	<b>-526</b>	<b>131</b>	<b>-657</b>
Opening cash and cash equivalents	3,303	3,172	131
Closing cash and cash equivalents	2,777	3,303	-526

**Free Cash Flow is calculated by aggregating (in € millions):**

the following cash flow statement line items:

	31 Dec. 2018	31 Dec. 2017
- Cash from operations after net borrowing costs and taxes	373	759
- Purchases of intangible assets and property, plant and equipment	-5,074	-5,180
- Investment grants received	2,046	2,350
- Proceeds from disposals of intangible assets and property, plant and equipment	97	94
Impact of the change in the WCR	58	-80
change in tax WCR included in the "Taxes (paid) collected" line item in the cash flow statement	-1	(0)
<b>Total free cash flow</b>	<b>-2,502</b>	<b>-2,057</b>

### 2.2. GENERAL OBSERVATIONS ON 2018 GROUP RESULTS

In € millions	31 Dec. 2018	31 Dec. 2017*	Change	
			In € millions	As a %
Infrastructure fees	5,648	5,821	-173	-3%
Freight compensation	54	62	-7	-12%
Other income	599	582	17	3%
<b>Revenue</b>	<b>6,301</b>	<b>6,464</b>	<b>-163</b>	<b>-3%</b>
Purchases and external charges	-2,127	-2,088	-39	2%
Employee benefit expense	-2,331	-2,315	-15	1%
Taxes and duties other than income tax	-231	-211	-20	9%
Other operating income and expenses	-60	16	-76	-475%
<b>GROSS PROFIT</b>	<b>1,553</b>	<b>1,897</b>	<b>-344</b>	<b>-18%</b>
GROSS PROFIT / REVENUE	25%	29%	-4 pts	

Depreciation	-2,107	-1,764	-342	19%
Investment grants released to profit or loss	1,035	779	256	33%
Net proceeds from asset disposals	60	74	-14	-19%
Net movement in provisions	86	113	-28	-25%
<b>Current operating profit</b>	<b>627</b>	<b>1,099</b>	<b>-472</b>	<b>-43%</b>
Share of net profit/(loss) of companies consolidated under the equity method	0	1	-1	-58%
Impairment loss	-3,400	-	-3,400	n.a.
<b>Operating profit/(loss)</b>	<b>-2,773</b>	<b>1,100</b>	<b>-3,872</b>	<b>-352%</b>
Finance cost	-1,241	-1,172	-69	6%
<b>Net profit/(loss) before tax</b>	<b>-4,013</b>	<b>-72</b>	<b>-3,941</b>	<b>5,461%</b>
Taxes	-771	-129	-642	498%
<b>NET PROFIT/(LOSS) FOR THE YEAR</b>	<b>-4,784</b>	<b>-201</b>	<b>-4,583</b>	<b>2,278%</b>

\* Fiscal 2017 restated for the IFRS 15 impact and the reclassification of commercial compensation (€32 million) from Purchases and External Charges to Revenue

#### 2.2.1. Revenue

Revenue of €6.3 billion dropped by (3)% or €(163) million compared to the end of December 2017, of which €(217) million following the first half 2018 strike that was also impacted by other exceptional items for €(29) million: the decrease in electricity rebilling and the resolution of litigation previously provided for with railway companies.

Restated for these exceptional impacts, business rose by +€83 million, primarily due to the increase in infrastructure fees under the combined effects of the rise in fee scales by +€64 million (+1.1% indexation for Passengers and +3.8% for Freight), and the commissioning of new lines (SEA, BPL and T11 express), partly offset by a decline in traffic, excluding the strike, by 9 million train-kms (Mtkm).

#### 2.2.2. Gross profit and current operating profit

Gross profit of €1,553 million declined by €(344) million or (18)% compared to 31 December 2017

The gross loss following the strike of the first half of 2018 is valued at €(226) million.

In addition, the increase in operating expenses is attributable for €(84) million to the resolution of previous litigations which had been provided, including the litigation involving former Moroccan employees following the decision of the Paris Court of Appeal handed down on 31 January 2018, and the resolution of disputes with certain rail companies. The data quality assurance relating to the change in the information system and the monitoring of fixed assets also had an exceptional impact of €(22) million on gross profit.

The increase in fees and the results of the performance plan (+€42 million in OPEX) offset the increase in expenses relating to inflation and wages, and thus gross profit is stable when adjusted for these exceptional events.

Current operating profit decreased by €(472) million compared to 31 December 2017, amounting to +€627 million. It was impacted by depreciation and amortisation charges and investment grant reversals for €(86) million arising from major commissionings in 2017, and by the €(14) million decrease in net proceeds from asset disposals. The €(28) million decline in provisions was due to the positive impact of provision reversals in 2018 (former Moroccan employees and rail company litigation), offset by the negative impact of 2017 provision reversals, including €(140) million for files covering the Arles flooding and risks associated with the poor weather in 2016..

#### 2.2.3. Finance cost

In € millions	31 Dec. 2018	31 Dec. 2017	Change
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Net borrowing costs	-1,255	-1,248	-7	1%
Other financial income and expenses	8	85	-77	-91%
Net finance cost of employee benefits	7	-9	16	-178%
<b>FINANCE COST</b>	<b>-1,241</b>	<b>-1,172</b>	<b>-69</b>	<b>6%</b>

Finance cost stood at -€1,241 million, a decline of -€69 million compared to 31 December 2017. The decrease was primarily attributable to non-recurring income in 2017 arising from the switch to bilateral margin calls on hedging financial instruments (+€85 million in 2017). In 2018, the impact of the increase in net debt for €(112) million was largely offset by the lower rates enjoyed by SNCF Réseau in 2018 (+€87 million).

### 2.2.4. Net profit/(loss) after tax

The French Government decided to limit the rise in TGV and Fret prices and authorise SNCF Réseau to boost its investments to renew and upgrade the network in the amount of €200 million per year as from 2022. The impacts of these decisions on the financial statements were partially offset by economic performance goals. The update to the trajectory for these new assumptions resulted in an impairment loss for SNCF Réseau's assets in the amount of €3.4 billion as at 30 June 2018. As part of the 31/12/2018 closing, SNCF Réseau did not identify any new indications of impairment and did not conduct any new impairment tests.

The net loss after tax therefore totalled €(4,784) million following a tax expense of €(771) million, compared to €(201) million and €(129) million, respectively, in 2017.

The €(642) million change in the tax expense is related to the discounting of the deferred tax asset calculation and new impacts: the effect of the planned debt reversal which will improve future net profits and taxable incomes, the draft French finance law for 2019 (Art. 13), which will reduce taxable income and the reduction in the deferred tax asset recognition period from 25 to 20 years.

## 2.3. INVESTMENTS

In € millions	2018	2017	Change	
			In € millions	As a %
Major development projects	762	1,212	-450	-37%
Of which PPP share	111	675	-564	-84%
Regional development projects	869	818	50	6%
Network compliance upgrade	268	246	22	9%
Renewal and performance	2,725	2,668	56	2%
Real estate and other	133	129	4	3%
<b>TOTAL RAIL INVESTMENTS</b>	<b>4,758</b>	<b>5,075</b>	<b>-317</b>	<b>-6%</b>
Industrial	299	303	-4	-1%
<b>TOTAL EXPENDITURE</b>	<b>5,057</b>	<b>5,378</b>	<b>-321</b>	<b>-6%</b>

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

Total investment expenditure represented €5,057 million, down by €321 million compared to 2017 (€5,378 million). Excluding expenditure for major projects under PPPs for €(564) million, investment expenditure was up overall by +€243 million, due to the major development project involving the RER EOIE extension in Ile de France for +€117 million, the increase in other regional investments for +€50 million, and the +€56 million primary network renewal effort to upgrade rail infrastructures.

Rail infrastructure modernisation is continuing at a steady pace under the renewal effort, which has been confirmed by the proposed new railway pact law.

### 2.3.1. Renewal and performance investments

The 2018 renewal programme demonstrates the company's determination to continue investing to upgrade the primary network with the greatest traffic volume.

Production stood at €2,725 million in 2018, for a +2% increase (+€56 million) over 2017.

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:

In physical units	2018	2017	Change	
Equivalent Planned Large Operations	835	961	-126	-13%
Number of points and crossings (*)	459	565	-106	-19%

\*Excluding high-speed lines

Track renewal investments amounted to €1,681 million, up +3% compared to 2017, with Ile-de-France accounting for 25% of the investments.

The **main projects** at 31 December 2018 involved the following segments: Amiens-Tergnier (53 km), Reims-Charleville-Mézières (52 km), Lourdes-Artix (45 km), Nîmes-Montpellier (42 km), Blois-Saint-Pierre-des-Corps (46 km), Aubagne-Toulon (37 km), Carcassonne-Castelnaudary (32 km), Saint-Gaudens-Capvern (28 km), Rennes-Dol-de-Bretagne (24 km), the Bois-le-Roi sectors for the Moret-Montargis Choisy-le-Roi segment on the RER C, the LGV Nord (28 km) with the fourth phase of the line's upgrade (18 km), and the LGV Atlantique (7 km) and LGV Méditerranée (12 km) lines.

Finally, a blitz operation carried out at Gare de Paris Montparnasse mobilised over 150 employees on 21 May 2018 to upgrade 17 switches and 500 metres of track in order to respond to traffic growth, improve train punctuality and maintain a high level of safety.

Signalling investments also increased compared to 2017, rising by 2%. Several significant operations were commissioned, specifically, the Rennes switching station that can manage over 40 trains an hour on 10 tracks or the link-up of Gare Paris-Nord to the Network Operations Centralised Command of the Paris-Aulnay-Roissy-Mitry line (RER B). Major upgrades also continued in Dijon, Creil and Toulouse enabling the centralised remote control and monitoring of switching stations.

The **Electric traction** activity, involving the upgrade of catenaries used to power trains, rose compared to 2017 (+€23 million or +13%). SNCF Réseau also initiated extensive and long-term work covering a catenary overhaul for the RER B and C lines in Ile-de-France and the Montréjeau-Tarbes segment in the Occitanie region.

Expenditure for **engineering works** (bridges, tunnels) and **foundational components** (embankments) fell by 10% (or €(20) million) compared to 2017 due to work planning. In 2018, SNCF Réseau initiated key works covering the renewal of the Siagne viaduct on the Marseille-Vintimille line, the Marly-le-Roi viaduct on the Transilien L line in Ile-de-France, and the reinforcement of the Grandes Murailles tunnel vault (671 metres) on the Lyon-Chambéry-Modane line.

**Telecom activity** declined compared to 2017 (by €(19) million, or (13)%). The deployment of fibre optics across the rail network continued with some 993 additional km, i.e. a network of 6,618 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 rose by +€7 million year-on-year. By way of example, this expenditure includes the Gare Austerlitz modernisation, the subject of a vast investment plan extending to 2020.

**Other renewal expenditure** increased by €10 million compared to 2017. It concerns major repairs, specific investments to improve punctuality, primarily in Ile-de-France or commercial investment projects for the Freight activity.

**Industrial investments** are relatively stable with a decrease of €(4) million (or (1)%). They mainly involved machinery, fixed installations, rolling stock, and monitoring and maintenance equipment to modernise industrial facilities and overhaul information systems in order to improve preventive maintenance, traffic management and project management. Of note is the inauguration of the Wagon-Pupitre workshop in Moulin-Neuf for enhanced industrial control.

### 2.3.2. Network compliance upgrade

Network compliance upgrade falls within the priority given by the company to specific safety and accessibility operations and compliance work. Production in 2018 was up year-on-year, particularly for the Safety and Accessibility activity.

**Safety investments** totalled €139 million in 2018, up €18 million or +15% compared to 2017. These investments mainly involved the removal of level crossings or adjustments to improve safety at level crossings, the removal or adjustment of public 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 2018, SNCF Réseau removed four level crossings listed in the national safety plan (Saint-Pierre-de-Chandieu in Auvergne-Rhône-Alpes, Nonant-le-Pin in Normandie, and Muret and Baillargues in Occitanie) and four public track crossings at the Gujan-Mestras and La Teste-de-Buch stations in Nouvelle-Aquitaine, the Bram station in Occitanie and the Bourron-Marlotte - Grez station in Ile de France.

**Accessibility investments** totalled €94 million in 2018 for compliance upgrades and €77 million for regional development projects financed by State-Region contracts, up sharply by +20% compared to 2017. The main accessibility operations primarily involved the adjustment of lifts and wheelchair ramps for persons with reduced mobility. These investments fall within the scope of the national and regional master plans adopted in 2015 and 2016, which provided for accessibility work at around 720 priority stations for nearly €3 billion by 2025, of which more than €800 million for national stations. Ile-de-France production rose in 2018, pursuant to the master plan concluded with Ile-de-France Mobilités, with actual costs of €109 million compared to €85 million in 2017. In other regions, production also rose, totalling €62 million in 2018 compared to €57 million in 2017. The main accessibility operations involved multiple stations, including Bayeux, Chaumont, Lyon Perrache, Marseille Saint-Charles, Méru, Versailles-Chantiers, Montereau, Epinay - Villeteuse, and Ermont - Eaubonne.

### 2.3.3. Network development

Network investment and development expenses decreased by €(400) million compared to 2017 primarily due to the end of major projects under PPPs resulting in a €(564) million decrease, offset by work on the RER EOLE (+€117 million) and other regional projects (+€50 million)

**- Major projects under PPPs €(564) million / (84)%**

In 2018, production arising from projects under PPPs totalled €111 million and mainly concerned the finalisation of related

work carried out under SNCF Réseau project ownership and the completion of the Gare de Montpellier-Sud-de-France.

As a reminder, the **LGV Sud Europe Atlantique SEA** and **LGV Bretagne - Pays de la Loire BPL projects** were commissioned on 2 July 2017.

Investments earmarked for the **Nîmes - Montpellier bypass project** totalled €49 million in 2018. The commercial commissioning of the 80 km segment of the new line was completed in December 2017 for freight traffic and July 2018 for passenger traffic with delivery of the Montpellier-Sud-de-France station: Montpellier is now three hours from Paris by train. Work on the Gare de Nîmes Pont-du-Gard will continue, with commissioning scheduled for the end of December 2019.

**- Major projects in progress +€117 million / +23%**

Expenditure for major projects in progress stood at €616 million in 2018. This category mainly comprises the Eole project for €586 million.

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 Hausmann-Saint-Lazare and Nanterre-la-Folie comprising three new stations at Porte Maillot, CNIT la Défense and Nanterre-la-Folie. The investment stands at €3.7 billion according to the project's economic conditions in January 2012 (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 section from Saint Lazare to Nanterre should be commissioned in 2022 and its extension to Mantes-la-Jolie in 2024.

The High-Performance Network programme is entering an operational phase, particularly by 2023 for the Paris-Lyon line to increase its capacity from 13 to 16 trains an hour (+23%) with three-minute intervals based on the ERTMS technology, and a strengthening of electric traction without an interruption in traffic (240 trains in daily circulation). This programme will also concern the Marseille-Vintimille line.

**- Major projects in the upstream phase €(3) million / (7)%**

The studies relating to future major projects will be ranked in order of importance based on the new mobility law following the report of the Infrastructure Guidance Board. The decisions made by the French State will determine the launch and progress of these real estate studies/acquisitions. In 2018, these studies amounted to €35 million and primarily concerned the Major South-West Projects programme, and the new Provence-Côte d'Azur, Paris-Normandie and Montpellier-Perpignan lines.

**- Regional development projects +€50 million / +6%**

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 2018 and 2019. Total expenditure stood at €869 million in 2018.

In Ile-de-France, the main ongoing projects involve the tram-trains with the extension of the T4 to Clichy-Montfermeil, the Tangentielle Ouest between Saint-Germain-en-Laye and Saint-Cyr-L'école (Tram 13), the Massy-Evry Tram-Train, network improvements (platforms, signalling, electric installations) intended to cover new Transilien rolling stock and interconnections with the Grand Paris Express network with

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ongoing projects in the Vitry Les Ardoines station, specifically the underground connection between the RER C and the future 15 Sud line, and in Clamart, at Vert de Maisons.

The CDG Express direct rail link (32 km - 20 minutes) between Paris Gare de l'Est and Roissy Charles de Gaulle Airport have entered the operational phase with the start of work.

Several lines came into service in 2018, including Saintes-Royan, Poitiers-Limoges, and Belfort-Delle, and the second phase of the Aix-Marseille line's renewal.

### 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 always 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 €55 billion;
- Euro Commercial Paper (ECP) Programme for a maximum amount of €5 billion;
- Negotiable European Commercial Paper (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.

As of 1 January 2020, SNCF Réseau will change status, adopting that of a public limited company with public capital, becoming a subsidiary of SNCF S.A, a full-function holding company wholly owned by the French State.

Pursuant to the Prime Minister's announcements on 25 May 2018 and under the rail system's reform, the French State will absorb €35 billion in SNCF Réseau debt, of which €25 billion in January 2020, and €10 billion in 2022, in order to substantively restore the company's financial structure while boosting SNCF operational performances.

In a press release dated 26 November 2018, the French Minister of the Economy and Finance indicated, via Agence France Trésor, that "this debt absorption would consist in setting up a mechanism of identical mirror loans between SNCF Réseau and the Caisse de la Dette Publique (CDP), following which the French State would replace SNCF Réseau as CDP's debtor, upon the French Parliament's authorisation under a finance law, thus relieving the company of the corresponding debt".

The equal treatment of the company's bondholders will be fully preserved under the terms and conditions governing the French State's absorption of the SNCF Réseau debt.

The new railway pact thus introduces major changes to the Group's organisation, the company's legal form, and the rail system's main economic equilibriums.

The announcement of the new "railway pact" had a substantial impact on the long-term financing capacity of SNCF Réseau on capital markets. The lack of visibility until November 2018

regarding the rail reform law's precise form, and the terms and conditions governing the debt absorption, have prevented SNCF Réseau from issuing long-term public debt at the desired level.

SNCF Réseau has thus been obliged to offset nearly half of its 2018 bond issue programme by short-term financing (maturity of less than one year).

At this stage, the agencies have confirmed the SNCF Réseau rating based on the rail reform.

As at 31 December 2018, the short and long-term credit ratings attributed by the agencies are as follows:

	Long-term	Short-term
Moody's	Aa2	P-1
Standard & Poor's	AA	A-1+
Fitch Ratings	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;
- 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 2018.

Following the shorter maturities for the 2013-2016 bond issues, SNCF Réseau was able to issue bonds with longer maturities: in 2017 and 2018, the average maturity on issue was 16.8 and 24.8 years respectively.

SNCF Réseau still benefits from solid financing, whatever the maturity, from a chiefly international investor base: the 31 December 2018 issues were subscribed by investors from France (30%), other Euro Zone countries (45%) and the Rest of the World (25%).

##### 2018 issues

- benchmark public issue of €1.0 billion over 30 years (maturing in February 2048);
- 11 issues with various maturities ranging from 12 to 44 years, for a total of €1,125 million.

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 based on IFRS

Considering all the financial instruments and the scope impacts of Public-Private Partnerships (PPP), the IFRS net debt amounted to €49.6 billion as at 31 December 2018, compared to €46.6 billion year-on-year.

### **Maintenance of sufficient liquidity to ensure the company's financing**

As at 31 December 2018, SNCF Réseau had €2.8 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.

SNCF Réseau also has a €1.5 billion syndicated credit facility (possibility of an increase to €2 billion) maturing in June 2022, with 15 partner banks.

This credit facility has never been drawn down.

#### **2.4.2. Market risk management**

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

## **2.5. FINANCIAL RELATIONS WITH THE FRENCH STATE**

### **2.5.1. Public funding related to network investments**

With respect to its network investments and project studies, SNCF Réseau receives co-financing from public and private partners: Public partners include the Agence de financement des infrastructures de transport de France (AFITF) or other regional authorities.

As at 31 December 2018, grants claimed by SNCF Réseau amounted to €1,546 million, including €340 million from the AFITF.

Grant receivables due stood at €381 million (including €268 million pending from the French State and the AFITF), compared to €799 million (including €370 million from the French State and the AFITF) as at 31 December 2017. For the SEA project, grant receivables due amounted to €252 million (including €217 million from the French State) as at 31 December 2018.

### **2.5.2. Taxation**

As at 31 December 2018, the direct business activity of SNCF Réseau is solely carried out on French soil and, apart from 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.

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### 2.6. SIGNING OF THE MULTI-YEAR PERFORMANCE 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 Transport Code. SNCF Réseau's commitment covers the main aspects of network management and a financial trajectory that includes the French State's financial backing.

This 10-year contract, which is 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 Transport 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 second 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. The contract's annual implementation report will thus be updated as and when the deliverables stipulated in the contract are achieved. Furthermore, three more detailed thematic reports – referred to in Article 4 of the contract – will be published by SNCF Réseau on its more regular initiatives.

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

Following the French government's decisions in May 2018 (partial assumption of the SNCF Réseau debt, limitation of the fee increase for non-regulated activities to the consumer price index, increased productivity, additional investment budget, etc.), the current contract needs to be significantly amended. Work will begin in 2019.

#### 2.6.1. Contractual indicators

The contract defines twenty indicators: ten industrial and commercial indicators and ten financial indicators (some of which are more for monitoring purposes). The following table describes the 2016, 2017 and 2018 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 Transport Code.

Industrial and commercial indicators	unit	2018	2017	2016	Milestones		Target	
					2018	2021	2026	
Maintenance productivity	-	-	-	-	Construction indicator			
Safety indicators	Causes of rail breakage on main tracks <sup>(1)</sup>	nb	128	141	161	152	146	140
	Track twists on main tracks <sup>(1)</sup>	nb	16	19	30	32	30	24
	Causes of signalling breakdowns	nb	221	261	262	255	248	227
	Signal passing authorisations without prior verification	nb	59	56	52	55	44	37
Quality of investments (excluding new line construction)	Compliance with completion costs	%	65	64	-	73	77	81
	Compliance with completion times	%	82	95	94	93	94	95
	Compliance with the functional programme	%	-	-	-	Construction indicator		
Average cost per km of track renewal operations on the primary network (high-speed line, IdF and UIC 1-6). Base index of 100 in 2015.	-	113 (prov.)	105	96	103	106	106	
Track length subject to traffic speed slowdown, as at 31/12	High-speed lines	km	0	0	0	0	0	0
	UIC 1 to 4	km	575	544	672	500	250	150
	UIC 5 to 6	km	666	750	695	700	500	400
Freight capillary line traffic covered by a partnership agreement in force	train-km	945,500	895,100	894,600	Based on partners' ability to commit and shippers' activity			
Freight and passenger service quality	-	-	-	-	Construction indicator			
Infrastructure quality by line	-	-	-	-	Construction indicator			
Quality of freight paths	%	<sup>(2)</sup>	68.7	64.9	61.5	To be defined jointly	80.8	
Frequency of accidents with work stoppage (number of accidents per million of hours worked) <sup>(3)</sup>	-	10.19	10.29	11.22	8.33	6.1	To be determined	

(1) Excluding UIC lines 7 to 9.

(2) The 2018 value will be available in Q2 2019 and published in the 2018 thematic report on the commercial offering, traffic and service quality.

(3) Within the SNCF Réseau scope. The scope is being extended to external subcontracting companies.

Financial indicators	unit	2018	2017	2016	Milestones		Target	
					2018	2021	2026	
Coverage rate of marginal cost through infrastructure fees paid by freight companies	%	68	68	64	-	-	-	
Savings generated by productivity gains (cumulative as of 2017)	In € millions	282	150	-	(1)	666 (2)	1622 (2)	
Coverage rate of full cost based on depreciation and amortisation accounting methods	%	85	92	94	(1)	(1)	(1)	
Net debt repayment amount	In € billions	48.2	45.5	42.0	(1)	(1)	(1)	
IFRS net debt	In € billions	49.6	46.6	44.9	(1)	(1)	(1)	
Net debt in real terms / gross profit ratio	ratio	31.06	23.99	22.24	(1)	(1)	(1)	
Gross profit / finance cost	ratio	1.04	1.28	1.32	(1)	(1)	(1)	
Average rate of SNCF Réseau debt	%	3.17	3.35	3.46	-	-	-	
Average remaining maturity of SNCF Réseau gross long-term debt	years	12.4	12.5	12.9	-	-	-	
Moody's, Standard & Poor's and Fitch Ratings	Long-term	rating	Aa2 AA AA	Aa2 AA AA	Aa2 AA AA	-	-	-
	Short-term	rating	P-1 A-1+ F1+	P-1 A-1+ F1+	P-1 A-1+ F1+	-	-	-

(1) Confidential values.

(2) The new railway pact trajectory includes an additional performance target (€380 million running to 2026), in relation to the performance contract.

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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 2019, will be used directly to calculate the contractual indicator.

In 2018, the summary safety indicator was the subject of discussion and work between SNCF Réseau, the French State (General Directorate of Infrastructures, Transport and the Sea (DGITM)) and the EPSF (French Railway Safety Authority). The finalised indicator has four components: causes of rail breakage, track twists, causes of signalling breakdowns and signal passing authorisations without prior verification. In early 2019, the parties reached an agreement on the indicator calculation method and the goal trajectories, as shown in the previous table.

Following a steady increase in the number of signalling breakdowns between 2008 and 2013, the situation has been improving since 2014. The year 2018 confirmed this trend, with, however, a rise in severe breakdowns (40 in 2018 compared to 34 in 2017, mainly involving level crossings). This rather positive trend for signalling should be compared with the tightened maintenance strategy and the improvement in certain equipment such as the new TSR electrical boxes. The measures undertaken to enhance the procedure to reactivate level crossings following construction work were efficient but other anomalies appeared (installation of warning devices, security procedure, errors in job-related actions, etc.).

The number of signal passing authorisations without prior verification improved in 2018 but fell short of the 2015 performance, which explains the decline in the aggregate indicator for the last three years. Most of these authorisations are due to an incomplete or erroneous reading of conditions (dispatch of a train on an undefined itinerary, poor understanding of the use of directional interlocking on the permanent counterflow installation, etc.). Several initiatives were undertaken, particularly the safeguarding of orders in certain traffic management sub-departments with specific identification as well as the drafting of an action plan on traffic errors. Furthermore, SNCF Réseau has started to digitise signal box operating documents.

The quality of investments is assessed according to three parameters:

- Compliance with completion costs: pending 2018 results
- Compliance with completion times: out of 95 operations monitored, 78 came into service on the agreed date. The main causes of delay or postponement are the direct or indirect consequences of the 2018 first-half strikes, arbitrations on work resources and problems in conducting studies, particularly when assigned to external partners.
- Compliance with the functional programme: more recent and more difficult to calculate, its preparation was impacted by the project management reorganisation in connection with the Nouvel' R roll-out; the indicator should be produced in 2019.

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). For 2018, it showed a substantial increase compared to forecasts due to the strike and a disruption of industrial facilities resulting in major production losses. This disruption was attributable to various external, administrative (level crossing closings) or internal factors: weather hazards, reduced capacities, organisational problems, particularly on closed line sites, equipment reliability, industrial hazards with the commissioning of the Dense Zone all-in-one track removal unit that did not

deliver the expected performance in the first nine months of the year (burn-in). In Ile-de-France, greater industrial renewals in extremely dense areas also impacted the average cost per km of track upgrades.

Track length subject to traffic speed slowdown decreased overall across the primary network (-53 km in total). The high-speed lines do not experience slowdowns and there was a slight rise in slowdowns on the main lines of the conventional network (UIC lines 1 to 4, +31 km), while there was a sharp decrease in slowdowns on the remainder of the primary network (UIC lines 5 and 6, -84 km). Regeneration work during programming should help to reduce the volume of slowdowns so as to keep contractual milestones

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 the AFITF, and then between SNCF Réseau and local co-financing partners. In 2018, new traffic was covered by a partnership agreement, representing an annual volume of nearly one million train-km per year.

Freight and passenger service quality is assessed by a working group with the stakeholders of the French Network Operators Committee (COOPERE) (railway companies, French transportation organising authorities, and other 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.

The infrastructure quality by line indicator is currently being produced. Following the example of other rail networks that have adopted this indicator, it requires extensive groundwork to understand and model the ageing of the various facilities making up the network and estimate their renewal cycle, particularly according to the technologies, environment and usage. This therefore involves long-term work that was initiated in 2018. The technical aspects of track – the most important of all – are already well known, with a similar indicator already in use.

Freight path quality is assessed using a composite indicator determined with the stakeholders at the French rail freight ministerial conference. It was used to calculate changes in the freight fee scale in force – 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 indicator's 2016 and 2017 values therefore show an improvement of the freight path quality in relation to prior years.

The frequency of accidents with work stoppage for the SNCF Réseau scope has improved since 2016 (-6%) but still falls short of the objective initially set for 2018. The indicator's extension to service providers working in the network is scheduled for 2020, allowing the time necessary to harmonise the calculation method between SNCF Réseau and the various service providers.

The coverage rate of marginal cost through infrastructure fees paid by freight companies reflects SNCF Réseau's aim, upon signing the contract, to reconcile freight pricing with its directly attributable variable costs. In 2018, 68% of these costs were covered by infrastructure fees. This practice was however thoroughly reviewed following the French government's decisions in May 2018.

SNCF Réseau's productivity performance reached +€132 million in 2018, thanks to an improved purchasing and industrial effort. The performance is in line with the railway pact trajectory drawn up in 2018.

The full cost of the network calculated using the financial accounts, based on the historical cost before asset impairment, totalled €7.5 billion at the end of 2018 and was 85% covered by earnings. The decrease in the coverage rate compared to 2017 (92%) is due to lower exceptional income in 2018 and the increase in depreciation and amortisation and the finance cost.

The 2018 changes in the following financial indicators are described in Note 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 2018 changes in the net debt/gross profit ratio are explained in Note 1.2.3.

Despite net borrowing costs that were stable, the gross profit/finance cost ratio dropped due to the €(344) million decline in gross profit.

### 2.6.2. Industrial milestones

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 or 2018; the progress of their implementation is shown below.

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, which is complex due to the wide range of infrastructure components and maintenance operations.

Computer-assisted maintenance management software (CMMS) is fully deployed for the following specialities: Electric power supply since November 2017, Catenaries since February 2018, Machinery since Q3 2018, Track since January 2019. For the Mechanical signalling speciality, a single Infrapôle is still to be completed (Aquitaine, March 2019). For train CMMS, 2 pilots have been in operation since Q4 2018, with general coverage scheduled for H2 2019. With regard to engineering works or foundational components, discussions are underway regarding CMMS integration or an overhaul of existing applications with a CMMS link: in any case, this would be scheduled for around 2021.

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. Nevertheless, SNCF Réseau is advancing by six months every year towards the five-year schedule target, as currently defined in the contract (chiefly renewal volume). The strategic control that is currently being finalised will however enable milestones to be set over the period of three to five years.

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 mindset as that described in the contract (analysis then consultation then creation), taking into account local contexts (e.g. Bordeaux metropolitan network project) and the relevant services

(particularly the Train d'Equilibre du Territoire lines). The master plan analyses incorporate the network's current technical state, service and service quality. As the short-term strategies have already been defined, the approach essentially covers the period subsequent to 2022. At the end of 2018, three-quarters of the analyses had been performed, with the remaining analyses nearing completion. Their consultation with stakeholders, which mainly focuses on mobility requirements and future services based on studies, is under way for half of the master plans and for the Train d'Equilibre du Territoire lines as well as the "service/infrastructure coordination platforms" set up under the supervision of the French State (e.g. on the Seine or Northern France sector lines). To better structure the dialogue and improve the coherence of service development assumptions, the consultation has been coordinated by geographical sector. The most advanced plans, particularly in the hubs (such as Toulouse, Nantes, Rennes, or Marseille), were included in the State-Region contracts. Several new plans will expire in 2019 (Orléans, Tours, Bordeaux, etc.), while others will be launched on the TET lines (Nantes – Lyon, Nantes – Bordeaux). The remainder will gradually be completed as part of a national approach to hubs and major lines such as the high-speed lines and conventional primary lines.

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). The principle was also applied to safety investments for level crossings. The asset management tool that updates the infrastructure by line quality indicator (see above) will also help improve the definition of renewal priorities.

The milestone that consisted 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, which was applied as from the first half of 2018.

Project safety reviews were developed in 2018, based on several models transmitted to project teams. As a priority, these reviews were applied to the most significant projects. At the same time, an internal workshop on project safety risks is organised every month.

Pursuant to the contract, SNCF Réseau conducted a satisfaction survey among various customers and partners (freight or passenger rail companies, 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.

Regarding the ERTMS, SNCF Réseau updated the role of the GCESD that is responsible for making proposals to create the ERTMS roll-out plan to help improve network performance. Furthermore, regarding the pilot projects initiated, SNCF Réseau focused on radio block centre (RBC) systems, with the launch of the call for tenders for this product intended for high-speed lines and the definition of functional specifications for the conventional network based on an analysis of the many required manœuvre issues. These phases fit into the timetable prepared for deployment between Paris and Lyon in 2024, and a commissioning of the ERTMS on the Marseille – Vintimille line in 2026, both projects determining the rate of work.

In 2017, the contract provided for the definition 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

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specifications to build a transversal carbon assessment tool. This tool is now under development and should be operational in 2019. It incorporates the methods developed for SNCF Réseau Green Bonds reporting for investors that were also shared at European level with regard to a European Green Bond regulation.

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 or not at all certified. The company's reorganisation in 2018 offers a new framework for the implementation of this milestone that has been initiated for several sensitive issues, particularly the construction (in progress) of a process management system or the safeguarding of sales proceeds.

The milestone covering 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 is regularly 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 company's reorganisation in 2018 had a major impact on the drafting of these reports, which also rely on a data availability time frame. Their publication is scheduled for the first half of 2019.



### 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, known as the “report on corporate governance”, which will be published jointly with this management report, 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 based on their type and assessed according to the probability of occurrence, impacts, and the control level's margin for improvement. Impacts are regularly assessed for each risk in accordance with a defined list of strategic, financial, legal, operating and reputational impacts, the same risk potentially having several impacts.

##### - High-impact risks in operational areas:

The main risks that may have significant operational impacts primarily concern railway network use 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 Note 3.3 below.

##### - High-impact financial risks:

Market risks comprise interest rate, liquidity, counterparty and foreign currency risks. These risks are defined, and their management described in Note 3.4 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 non-discriminatory competition and tightened the procedural requirements needed to maintain SNCF Réseau's independence vis-a-vis any other rail company. The management of these risks is described in Note 3.5 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). Accordingly, the performance contract signed on 20 April 2017 provides it with the means to undertake its industrial transformation and fulfil the missions attributed by the French State.

Under the new railway pact, the change in SNCF Réseau's legal form could impact its activities and/or financial position, including the rating of SNCF Réseau and its share. The extent

and shape of this impact cannot yet be determined or anticipated.

##### - High-impact reputation risks: (image and reputation):

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 also 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 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 to ensure the effectiveness of the measures undertaken to mitigate the primary risks likely to impact its assets (human, material and information-based), reputation or results.

Measures are adopted at all levels to improve these procedures, so as to enhance 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 SNCF Réseau's general risk management system (general Enterprise-wide Risk Management (ERM) system). It provides the company's teams and management with the resources, tools and methodological aids needed 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 mapping of the company's major risks, 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 ensures that the risk reduction policies defined by risk owners meet an acceptable level for the company.

Its transversal actions in the general management of risks and opportunities are coordinated with the Security Division and the National Chief Fire Safety Officer of the Network Security & Safety Department, the Legal Affairs and Compliance Department, 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 PRG Audit and Risk Directorate.

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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 (15 in 2018), 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 risk mapping update is submitted to the Audit, Accounts and Risk Committee and, since 2018, the SNCF Réseau Board of Directors.
- For certain functions: 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 strategic, 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 Note 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 national safety authority - 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 safety policy published in 2017. They are set out in the Safety Management System manual and implemented through the company's processes and procedures. This manual was submitted to the EPSF, which issued a 5-year safety authorisation to SNCF Réseau on 1 July 2016.

SNCF Réseau draws up an annual safety report regarding its infrastructure management activities. For its part, the EPSF

prepares an annual safety report on the French national rail network, based on reports from the rail companies and infrastructure managers and its authorisation and control activity with respect to operators.

The safety architecture is structured around SNCF Réseau's Executive Management teams and the specific organisation for Ile-de-France. Delegations are prepared by the Chairman and allocated to all the operating units of these Executive Management teams, via the Deputy General Directors concerned, and to the General Director for Safety. Safety responsibilities are also defined at each level, including Executive Management, safety management, and the transversal national and regional safety bodies.

A certain number of services are pooled together within 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. Periodic compliance audits are carried out in response to this primary task. Under the contractual authority of one or more of the three EPICs, including SNCF Réseau, the Safety Audits Department conducts design or thematic audits to assess the ability of a system or the capacity of a product, an organisation, or process to meet the specified safety requirements and objectives. The Safety Audits Department is ISO 9001:2015 certified by AFNOR.
- The Safety Department's main duties are to:
  - o facilitate the PRISME programme<sup>1</sup>, in particular risk-driven management, document simplification, and the management transformation policy, ensure that it is well established within the PRG, and develop a common safety culture,
  - o 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 relies on 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 has undertaken 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 production region) the national safety risk priority matrix;

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<sup>1</sup> See Note 4.2

- 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 a 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.

### 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;
- the industrial IS.

They specifically rely on the Executive Management of EPIC SNCF within the PRG to host the conventional IS, cross-cutting office automation services, and management of cross-cutting HR and accounting IS in addition to services processed internally such as local support operated by Operations & Production Department.

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 and supervises IS Safety and Continuity work.

Overall management is carried out via various steering committees organised by the DGST or Project steering committees coordinated by Executive Management and the IS Department.

Each unit of the IS Department (within the DGII) relies on a quality management system (QMS, ISO 9000 and ISO 20 000 classification for the IS 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 two Cyber-security Managers. The CISO coordinates an Information Systems Security & Continuity network within each Department. 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 Information Systems 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 rule deviations, 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 recent 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.

### 3.3.4. Industrial and environmental risks

- Environmental risk generated by our operations

The measures undertaken to reduce the impact of industrial activities on the environment are described in Section 4.4.4.

- 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 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, alarm-based intervention, air surveillance operations, etc.);
- using resources and solutions provided by the Real Estate Department under the General Real Estate Appraisal Agreement signed in 2015.

The Security Department coordinates a network of security correspondents within the Directorates to coordinate security

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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 the Engineering Zone Departments.

In 2018, the Security Division of the Network Security & Safety Department worked closely with the Directorates to implement long-term security strategies based on five primary aims:

- better identify the vulnerabilities and threats to which SNCF Réseau and the Departments 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 Directorates, to comply with government requirements and the new French Transport Safety Directive.

### 3.3.6. Fire safety

The National Chief Fire Safety Officer attached to the Safety, Security & Risks Department 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 (real estate management and appraisal agreement);
- roll-out of a specific policy to safeguard national 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;
- 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 institution Directors, institution fire safety correspondents, and local fire safety correspondent.

### 3.3.7. Personnel safety

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

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 "life-saving rules" rolled out in 2018 are intended to consolidate the core principles employees must respect to ensure their own safety.

The commitment to safeguard our production is described in Note 4.3.1.

## 3.4. FINANCIAL RISK MANAGEMENT

### 3.4.1. Financial risks

#### - Liquidity risk management

Under its financial strategy, SNCF Réseau must always 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 2018, 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;
- NEU CP (Negotiable European Commercial Paper) programme for a maximum amount of €3 billion.

SNCF Réseau also benefits from a €1.5 billion credit line (possibility of an increase to €2 billion) 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 for each of these thresholds is authorised by the Board of Directors.

The Financing and Treasury Department's 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.

Compliance with the authorised threshold by counterparty is monitored daily by the Financing and Treasury Department's Middle Office/Control.

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 €90.6 million at 31 December 2018, compared to €64.3 million at the end of 2017.

### 3.4.2. Anti-corruption and anti-influence peddling

The French law of 9 December 2016 on transparency, the fight against corruption and modernisation of economic life ("Sapin II") imposes the set-up of an anti-corruption and anti-influence peddling system and a general requirement to comply with relevant applicable laws.

Pursuant to the applicable laws and recommendations of the French Anti-corruption Agency, the SNCF Réseau's internal system involves the roll-out of several initiatives:

- A 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 in July 2017;
- an anti-corruption code of conduct was published by the SNCF Group Ethics and Conduct Office. The code of conduct was supplemented with an "Ethics Charter for the sale of dismantled or scrapped goods" that was drawn up in October 2018, presented to the Group's Ethics Committee and broken down into "Local Ethics Instructions" by owner of the risk "Corruption during the sale of old materials on sites and the network";
- in 2018, specific training facilitated by a legal firm was included in the training program and proposed to all employees;
- partner due diligence procedures were set up. These procedures were drawn up by the SNCF Group Ethics and Conduct Office and the SNCF Group Purchasing Department;
- accounting verification procedures;
- an internal whistle-blowing procedure;
- a disciplinary procedure.
- an internal control and assessment system for any measures implemented, based on internal control actions.

To complete this system, at the end of 2018, SNCF Réseau appointed a compliance officer who reports to the Legal Department.

Finally, this system was audited by the AFA in 2018 (report not submitted to date).

### 3.4.3. 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 Directorate and the Finance Departments of SNCF EPIC, SNCF Mobilités and SNCF Réseau, meets three times a year to determine internal control objectives and ensure 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 2018, assessments in the SNCF Réseau scope covered the control environment and the management of purchasing and supplier payments.

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 ten or so entities were also visited to validate the roll-out of action plans in particular.

## 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 acts as the legal advisor for the entire company and is supported by the teams of the Group's Legal Department for regional issues.

It also works in conjunction with the various Departments involved in risk control:

- it prepares the files submitted to the Procurement Contract and Purchasing Committee, whose meetings it 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;
- In conjunction with the HR, Internal Control and Risk Departments, it acts as the Ethics and Conduct Office interface for the implementation of the compliance

## 02 - Management report

programme required by the Sapin II law regarding anti-corruption and influence peddling and verifies the progress;

- it implements the measures to be undertaken with the Haute Autorité pour la Transparence de la Vie Publique (French Authority for Transparency in Public Life) regarding 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 May 2018 and oversees the company's Data Protection Officer (DPO);
- 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 Mission de contrôle économique et financier des transports (Department of Economic and Financial Control for Transport) for procurement contracts and other contractual commitments comparable to contracts, sales of aged materials, equipment and leasing. It also ensures that the procedures for allocating a procurement contract or other agreements are fair, that the financial terms and conditions obtained are acceptable and that 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 Note 3.5.4), 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. This policy is part of a more global approach shared between the major players of the Public Rail Group.

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. It is also designed for later use at 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 pooled its insurance purchases for the benefit of the new 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, 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.

The Risk and Insurance Division (DRRA) within the Group's Legal Department ensures that insurance purchases are properly pooled for the entire PRG on a daily basis. The various insurance policies designed and subscribed by the DDRA on

behalf of PRG entities are contracted with leading insurers in the branches concerned. The DDRA actively manages the policies in cooperation with the broker-advisors and the entities, business lines and projects concerned.

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 Risk and Insurance Division Insurance Department are responsible for the amicable settlement of claims and serve as the main intermediaries for insurance matters within their geographical scope.

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 cyber risk" programme, newly concluded in 2018.

## 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.

**Government Commissioner:** He ensures that SNCF Réseau's general policy is defined by the Board of Directors 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 (MCEFT):** 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 was published at the end 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 non-discriminatory access to the network and service facilities (stations, marshalling yards, sidings, freight yards, other services),
  - o 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 Customer and Services 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 Finance, after the approval of the Audit, Accounts and Risk Committee. They audit the accounts and may identify during the year major internal control risks and deficiencies likely to have a 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 that provides an organisation with assurance on the management level of its operations and advice to improve this management in the form of recommendations, and thus 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 Division is responsible for the transversal management of purchases in the company. It drafts the company’s purchasing policy with respect to the corporate plan, particularly its “Industrial policy”, and breaks it down into action plans shared with the SNCF Réseau business lines. It also oversees the implementation of this industrial policy. 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 Departments.

The Purchasing Division 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 Division and the SNCF Réseau Performance 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 Division’s internal control plan in accordance with the principles issued by the French Financial Markets Authority, from creation of the need to final payment. 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.

With respect to the streamlining of governance with suppliers, and more specifically strategic suppliers, the process undertaken in 2016 is now intrinsic to the fundamental management practices. It also provides support in terms of methodology with the development of toolboxes for buyers, an intranet, news flashes, guides and databases since the coming into force of the Decree of April 2016 governing public procurement contracts. Lastly, SNCF Réseau’s Purchasing Division applies a responsible purchasing policy, as explained in Note 4.2.2.2.

The Operational Excellence programme initiated in 2016 was ramped up in 2018. The Purchasing Division currently has two certified Black Belts with four in training. It also has 11 certified Green Belts with 16 others pursuing training.

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

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### 3.7.2. Control and supervision by the Economic and Financial Performance unit

#### 3.7.2.1. General organisation

The Finance and Purchasing Directorate – Management Control and Forecasting 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 are a continuation of the long-term 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 a 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 monitoring the accounting separation of service facilities coordinated by the SNCF Réseau Finance and Purchasing Directorate in conjunction with the Regulation Department.

#### 3.7.2.3. Budgetary strategy

The projected budget is drafted by the Finance and Purchasing Directorate and submitted to the Departments 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 Departments and extracted from the 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 Department.

### 3.7.3. Accounting and tax standards

The Accounting and Tax Standards Department assumes the following duties

- transpose the accounting and tax guidance throughout the company;
- provide aid and advice to the various Departments in the drafting of contracts or other financial arrangements to anticipate and/or secure the resulting accounting and tax impacts;
- Draft the procedures used to produce accounting and tax information, including internal control components, in liaison with the various players concerned.

In 2018, SNCF Réseau implemented the new standards IFRS 9 on financial instruments and IFRS 15 on revenue recognition. It also continued to prepare for the adoption of the new IFRS 16 standard on leases as from 1 January 2019.

The update of the collected accounting and tax procedures also continued in 2018. It mainly covered the procedures relating to the recognition of inventories and investments.

Discussions with the tax authorities concerning the most recent audit were successfully finalised during the year.

In 2018, SNCF Réseau also pursued its VAT training sessions to secure the application of VAT to issued invoices, including those relating to calls for financing.

SNCF Réseau has been consolidated for tax purposes within the SNCF Group since 1 January 2015.

### 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, and 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 the accounting teams to manage closing accounting entries on a monthly basis. It mainly relies on monthly meetings with each Department and summary memos.

The Shared Service Centres and Processes Department organise and prepares the accounting information using 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 placed under the responsibility of SNCF, which assist the Shared Service Centres and Processes Department in carrying 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 two SSCs 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. Specifically, it handles:
  - o external invoicing and recording of invoices and inventory accounting entries;
  - o 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.

### 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 FTD 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 FTD 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 one-off 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. NON-FINANCIAL PERFORMANCE STATEMENT

To meet future sustainable transport challenges, with a focus on safety, SNCF Réseau is developing its rail infrastructure manager 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. IDENTIFY OUR RISKS TO BETTER MANAGE AND DEVELOP OUR OPPORTUNITIES

Pursuant to the regulatory requirements established by the transposition of the European Directive on Non-Financial Reporting of 22 October 2014 into French law, SNCF Réseau completed its sustainable development policy throughout its value chain by identifying its main environmental and social risks and opportunities and its obligations with respect to human rights and the fight against corruption.

##### 4.1.1. The methodology used to analyse risks and opportunities

The methodology used to map risks and opportunities is based on three major phases:

1. The definition of SNCF Réseau's universe of non-financial risks identified 23 risks and opportunities that could impact the company or society due to the activities carried out. The universe of risks and opportunities was established based on recognised sector benchmarks (such as MSCI, GRI and SASB) and the analysis of existing materiality. Specific attention was paid to the consistency of the universe of risks and opportunities with the sustainable development policy's priorities and the challenges already identified. This will ensure the consistency of SNCF Réseau's sustainable development policy with the universe of risks and opportunities communicated in the non-financial performance statement.

2. Each non-financial risk and opportunity was then rated based on an approach corresponding to that of the SNCF Réseau Risk Department. The rating process was carried out with 6 managers representing various Departments. Each risk and opportunity was assigned a rating based on the following criteria:

- severity of the risk's impact in terms of reputational, legal, operational, human or environmental factors;
- probability that the risk will occur.

3. Based on the rating results, 10 risks and opportunities were prioritised and validated by the Executive Committee.

##### 4.1.2. Major risks and opportunities

7 risks (in blue) and 3 opportunities (in yellow) were identified as major:

- 1 Failure to protect the health and safety of employees at work and that of service providers
- 2 Lack of infrastructure and network safety vis-a-vis rail companies, passengers, third parties and personnel
- 3 Lack of service quality

- 4 Absence of network resilience in the face of climate change impacts
- 5 Difficulties in the recruitment, retention and management of key competencies in response to the company's needs
- 6 Soil, air and water pollution
- 7 Information system and data protection failure
- 8 Regional support for the opening of the passenger market to competition
- 9 Regional development and consultation in project implementation
- 10 Development of the circular economy approach and waste recovery

SNCF Réseau is not simply managing these risks, it is also taking advantage of the opportunities offered to develop its sustainable development performance. Voluntary policies rolled out within the company are managed by performance indicators, for the benefit of the SNCF Group's raison d'être: **"Ensuring freedom of movement for all while preserving the planet"**.

This section presents the sustainable development policy of SNCF Réseau and the evidence backing its performance. The major risks and opportunities and their key performance indicators are highlighted by a blue or yellow insert and the point to which they refer.

#### 4.2. SUSTAINABLE DEVELOPMENT POLICY AND ITS PRINCIPLES FOR ACTION

Prepared in accordance with ISO 26000<sup>2</sup>, the sustainable development policy 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. The Oekom agency ranked SNCF Réseau number 1 worldwide in the transport infrastructure management sector with a B- rating.

2017 Note	Position

<sup>2</sup> 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.

Vigéo	66/100	Second in a panel of 38 European logistics and transport companies
Oekom research	B-	First in a panel of 45 European logistics and transport companies

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. The initiatives described in this section reflect the commitments of SNCF Réseau in terms of responsible modernisation.

#### 4.2.1. 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, while 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 details SNCF Réseau's governance and management compensation.

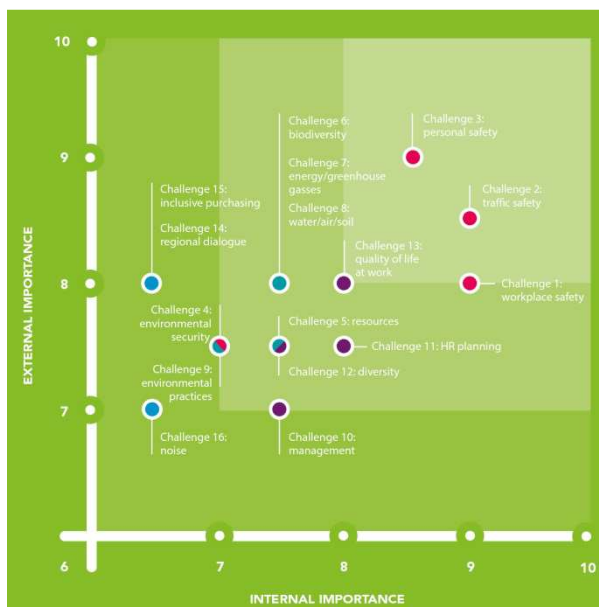
INDICATORS	2018	2017	2016
Number of times the Board of Directors met during the year	8	8	9

#### 4.2.2. Openness to stakeholders

As a public-sector company with a general interest purpose, SNCF Réseau is at the service of railway companies, 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. Interviews were held with the various counterparts and a major survey was conducted 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 sustainable development 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.

Complementing the non-financial risk analysis performed in 2018, this materiality matrix provides greater robustness and legitimacy to SNCF Réseau's sustainable development strategy, leaving the company 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.

#### 4.2.2.1. improve network access for our rail company clients and support the regions in the opening of the passenger market to competition

Responds to points **3** and **8**

##### - Quality systems

The service quality approach is accompanied by the setting of objectives and the measurement of the degree of client satisfaction. The results of the 2018 survey were shared with all clients during the meeting held on 17 October in Paris.

Our clients (freight and passenger companies, shippers, and Combined Transport Organising Authorities) are satisfied with the exchanges and appreciate the relationship with their SNCF Réseau counterparts and their commitment, as well as the quality of the business dialogue. They insist on SNCF Réseau's major role in maintaining and supporting the competitiveness and appeal of rail transport.

in this context, our clients have nevertheless suggested areas of improvement for SNCF Réseau, essentially involving three points:

- the deadline for an alternative adapted response should it be impossible to respond to the first request;
- a firm response as soon as possible for a train path request;
- schedule stability.

Existing incentives for both the infrastructure manager and train path applicants were renewed in 2018:

- the **reciprocal incentive scheme**, established in 2015, sanctions railway companies 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;
- the **Performance Improvement System**, an incentive measure that sanctions the infrastructure manager (IM) and/or railway companies responsible for irregularities resulting in traffic delays (penalties are based on the number of minutes lost per 100 km);

INDICATORS	2018	2017	2016
3			
Number of minutes lost per 100 km by RC:			
- for IM reasons (min)*	1.46	1.34	1.38
- for RC reasons (min)*	2.13	2.12	2.10
Capital expenditure to improve reliability (€ million)	29	36	44

\*2018: estimated data

- the **framework agreements** under which the infrastructure manager undertakes to allocate a commercial capacity, defined upstream, to a customer

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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 (TPOA)** under which the infrastructure manager undertakes to eliminate uncertainty within a defined timeframe on a pre-determined list of train paths. There was a marked improvement in 2018, the efforts made to respond more rapidly to customers being the main reason.

INDICATORS	2018	2017	2016
Traffic in train.km (M T.km)	441	476	470.8
Freight traffic from railway companies other than Fret SNCF (%)	54	52	49
Passengers traffic from railway companies* other than SNCF (%)	5.0	4.8	5.2
Satisfaction rating for railway undertaking customers (out of 10)**	na	5.5	na
Generic window consumption rate (%)	91.3	88.8	84.9

\*Including the Thalys and Eurostar subsidiaries

\*\*Biennial satisfaction survey

- **A new catalogue of service offerings adapted to new types of clients**

SNCF Réseau is rolling out a new “major accounts” approach for both current clients and the clients expected as part of the opening of the Passenger market.

With the opening of the Passenger market, SNCF Réseau and SNCF Mobilités are anticipating new types of clients (investor clients, mobility companies wishing to develop rail operations, rail companies operating in Europe or already managing passenger transport services in foreign countries, etc.).

The work covering the new service offering, new processes, and the new Client relationship falls under the Nouvel’R corporate plan.

To develop the regional rail offering and anticipate new mobility needs, SNCF Réseau is seizing the opportunity afforded by the opening of the regional line market by supporting both the regions as of 2019 (tender bids for the regional market will be mandatory beginning in 2023) and the transport companies who will have access to the high-speed lines beginning with the 2021 annual service agreement under OPEN ACCESS.

Three newly created service offerings will be marketed in 2019:

- Data and IS;
- Studies and Consulting;
- Training.

To accompany the Document de Référence du Réseau, which remains the benchmark regulatory document, the broad principles of a service catalogue were presented to clients during the annual meeting organised in October 2018.

- **New website [www.sncf-reseau.com](http://www.sncf-reseau.com)**

In November 2018, SNCF Réseau launched a new website designed to provide information to networks clients. Users can discover all the services offered by the infrastructure manager.

- **Supporting the regions in the opening of the passenger market to competition**

Beginning in early 2018, SNCF Réseau, which has assembled a project team tasked with preparing the passenger market’s opening, has assisted the regions with various issues that fall within the infrastructure manager’s competence:

- sharing of key milestones regarding calls for tender procedures, with a description of the role and support offered by SNCF Réseau for each major stage;
- support for allotment projects, with the contribution of factual components to operational reasoning in order to clarify regional decision-making, with regard to the level of robustness sought;
- presentation of essential data to support the mobility strategy’s definition and/or of a call for tenders’ preparation;
- proposal of a cooperation agreement dedicated to the preparation for competition.

SNCF Réseau has determined that it will meet with all the regions regarding the passenger market’s to opening competition by the end of 2019.

INDICATORS	2018	2017	2016
8 Number of transport organising authorities (TOA) (regions and the French State) met at least once during the year from among the 13 TOAs in mainland France	7	-	-

- **Accessibility for persons with reduced mobility**

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 €130 million for more than 40 million train departures, i.e. an average of €3.2 per train departure.

Under Order 2014-1090 of 26 September 2014, SNCF Réseau must contribute to a National Accessibility Master Plan under the Programmed Accessibility Agenda and Regional Accessibility Master Plans.

As a priority, 720 stopping points (stations and stops) will be made accessible to persons with reduced mobility.

These accessibility agendas are planned until 2025 for an estimated budget of just over €2.8 billion.

INDICATORS	2018	2017	2016
Number of stopping points for which accessibility work has been competed at the national level	29	34	44
Capital expenditure to improve accessibility (€ million)	171	142	132

### 4.2.2.2. **Responsible purchasing policy: Develop a partnership with our suppliers and subcontractors**

SNCF Réseau has implemented a responsible purchasing policy that relies 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. In 2017, SNCF Réseau received a score of 70/100; the 2018 score will be published in March 2019.

In 2018, the SNCF Réseau Purchasing Division organised the second edition of InnoDays. This is a special occasion for exchanging with SNCF Réseau's suppliers and internal players surrounded by the innovations presented by exhibitors (members of the French Railway Industries Association (FIF)).

SNCF Réseau has also modernised its dialogue with professional channels. In 2017, SNCF Réseau decided to adopt the EDMA rating (quality and safety) when allocating railway procurement contracts. This initiative, shared with the Syndicat des Entrepreneurs de Travaux de Voies Ferrées (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	2018	2017	2016
CSR performance of SNCF Réseau suppliers (average rating over 100 EcoVadis evaluations)	56	56	54

#### - Optimisation of settlement periods

In 2017, the SNCF Réseau Finance and Purchasing Department decided to optimise the purchasing process, from the initial order to settlement of invoices.

This work was based on the Operational Excellence approach, the objective being to streamline practices with ground-breaking solutions so as to simplify operating processes with suppliers.

This approach was structured based on three projects:

- Overhaul of invoice processing for work services;
- Optimisation of the invoice validation circuit;
- Contracting and management of purchase orders.

Several simplifications were implemented in 2018 and the process is being pursued as part of the continuous improvement strategy.

This work reduced the amount of late supplier payments by 38% between the end of 2017 (€32 million) and the end of 2018 (€20 million).

#### 4.2.3. Ethics as a basic corporate value

Considering its ethical commitment as an essential condition to its technical, financial, economic and social performance, SNCF Réseau is pursuing its actions to ensure that the ethical values common to all Group employees are understood, respected and adopted, namely: Integrity, Responsibility, Respect of the individual, Trust and Courage.

The network of Ethics officers regularly promotes the whistleblowing resources made available to employees by the Ethics and Conduct Office, such as the recent My Etic application.

SNCF Réseau actively contributes to the implementation of the anti-corruption programme, as set down by the Law of 9 December 2016, having already trained over 800 employees at the end of 2018.

INDICATORS	2018	2017	2016
Number of whistleblowing incidents at the Ethics and Conduct Office concerning SNCF Réseau	19	25	16

#### 4.3. 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 requirements<sup>3</sup>:

- ensure, in respect of network design, modernisation and maintenance, infrastructure usage conditions that enable railway companies 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. This value is transcribed in the general safety policy. The safety culture in of itself is a major issue. The hope for SNCF Réseau is that the safety value naturally imposes itself on individual and organisational conduct.

A "Safety Excellence" process has also been implemented via the six transformation strategies of the PRISME programme 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 **I**nterfaces 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

<sup>3</sup> Further information on SNCF Réseau's safety policy is available at: <http://www.sncf-reseau.fr/fr/a-propos/notre-strategie/renforcer-la-securite>

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responsibility, to reduce accident risk as much as possible (severity and frequency);

- develop the most innovative tools and Equipment to offer each employee a safe work environment and secure technological means.

Human and organisational factors are considered, from the design to the commissioning of facilities, as well as in daily network management operating processes and procedures to enhance the system's management by putting people first.

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.

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

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

In 2018, the Chairmen of the SNCF Mobilités and SNCF Réseau Executive Boards signed the European Railway Safety Culture Declaration initiated by the European Union Agency for Railways. This declaration demonstrates the commitment of European rail company leaders in terms of promoting a positive safety culture and raising the awareness of all industry players. A positive safety culture reinforces the effects of the Safety Management System by improving its capacities and efficiency.

### 4.3.1. Ensure that our work sites are completely safe

#### 4.3.1.1. Safety of employees and subcontractors

Responds to point **1**

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 seeks to reduce by half the rate of accidents with work stoppage between 2015 and 2020.

This commitment, confirmed in the PRISME programme, proved successful as from 2016, with a 5% reduction that year, and nearly 15% in 2017. However, this was not the case in fiscal 2018. Furthermore, the number of accidents involving employees from external companies is a major focal point for improvement.

In the autumn of 2018, SNCF Réseau pursued the safety train initiative which met with notable success in 2017. This event helped to renew risk awareness and bolster the safety culture.

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	2018	2017	2016
<b>1</b> Frequency rate of workplace accidents with lost time excluding commuting (%)*	10.2	10.3	11.2
Severity rate of workplace accidents (%)*	0.42	0.475	0.505
Number of occupational illnesses reported *	112	131	54
Number of fatalities			
- SNCF Réseau employees	2	1	4
- subcontractors	3	5	1
Number of serious injuries			
- SNCF Réseau employees	6	14	16

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- subcontractors 22 11 14

\*For 2018: data over 12 months at the end of December observed on 4 February

### 4.3.1.2. Information systems security and protection of personal data

Responds to point **7**

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 operational and financial performance.

An IS Security Policy & Directives database covering all conventional and industrial information systems is currently being finalised and rolled out. It comprises an IS security policy, all ISO 27001 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 rule deviations, 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 recent 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.

In 2018, a new General Data Protection Regulation (GDPR) reinforced the protection of personal data (data directly or indirectly identifying natural persons: employees, clients, local residents, elected representatives, etc.). This new regulation makes companies accountable and requires the implementation of technical and organisational measures to guarantee data protection. It provides for fines of up to 4% of SNCF Réseau's revenue. There is therefore a significant impact on current practices and guarantees, as well as the evidence to be provided in the event of a CNIL inspection or grievance. 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 was appointed in early 2018 to ensure compliance with the new regulatory requirements within SNCF Réseau. The IS Security Policy therefore plays a major role in terms of GDPR compliance.

The objective is to have 100% of projects covered by the IS Security and Data Policy: personal data processing could thus be identified, and the appropriate data protection technical measures implemented.

INDICATORS	2018	2017	2016
<b>7</b> Percentage of projects covered (%)	80	-	-
<b>7</b> Number of DPO solicitations	100	-	-
<b>7</b> Number of new personal data treatments registered	7	-	-
<b>7</b> Number of PIAs	1	-	-

### 4.3.2. Offer a safe network to railway companies

Responds to point **2**

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) involving rail operations, all causes combined, decreased by nearly 4% compared with the previous year. Excluding adverse weather

conditions, the decrease would have been approximately 15%. The exposure to weather events demonstrated by these figures will require SNCF Réseau to improve its environmental risk assessment. The objective is to dramatically lower the annual number of SSIs involving rail operations, all causes combined, by December 2020.

With regard to safety, SNCF Réseau is actively engaged in dealing with all malicious acts that impact 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, fiscal 2018, as was the case in 2017, was marked by an upsurge in this activity. This situation is explained by the continuing high price of copper and the significant volume of work on the French national rail network, giving rise to inventories of materials that were not sufficiently protected in certain cases.

There was also an upsurge in battery theft at level crossings in targeted sectors with long history of this type of malicious act (Montpellier region in particular).

The number of French national rail network intrusions remains high and still has a major impact on rail production, over and above the security and safety consequences.

Lastly, 2018 was also marked by numerous internal or external strikes. Several malicious acts were identified during these periods, particularly at safety installations.

In terms of fire safety, SNCF Réseau has defined a plan to safeguard technical facilities (electronic signalling, telecommunication, electrical traction and information systems) to protect these premises from the risk of fire. This plan will be rolled out in 2019.

renewed and effective partnership with external service providers.

#### - Regularity

Fiscal 2018 was heavily marked by the April-June strike and the extent of bad weather. With about 100,000 fewer trains in circulation during each month of the strike, there is little comparison between the 31 December 2018 results and those of the previous year.

The number of minutes lost and the number of incidents behind this lost time are down by 10% and 4%, respectively, compared to 2017.

Despite these phenomena, when observing a longer period, the sources of irregularity are relatively stable, suggesting the necessity of acting on the fundamentals.

In 2019, the management of regularity will be reinforced by improving areas deemed to be sensitive. This will be accomplished by pursuing the following strategies:

- maintaining or reducing the irregularity rate overall and for the network share;
- improving the traceability of cancelled trains and the quality of input regarding incidents that impact regularity;
- improving punctuality to 0 min on departure (H:00 programme);
- improving the understanding of signalling failure modes and their causes so as to better eliminate those with the greatest impact on service;
- reducing the impacts of catenary incidents;
- decreasing the number of regularity incidents due to seasonal events (adhesion, extreme cold or heat) or wildlife;
- improving work shift reliability and anticipating the restoration of capacity.

INDICATORS	2018	2017	2016
Risk value for travellers (weighted number of fatalities and serious injuries per million km.train)	0.0018	0.003	0.007
2 Number of significant safety incidents attributed to SNCF Réseau all causes combined	137	142	152
Number of malicious acts involving SNCF Réseau property and financial assets*	17,491	17,730	16,086
Total safety investments (€ millions)	138.6	120.3	93

\*Redefinition of the scope in 2016

#### 4.3.2.1. Network operations: safety and reliability challenges

##### - Safety

Changes to safety management and the risk-based approach initiated by the PRISME, H:00 and FIRST programmes continued in 2018. Overall, the fundamental safety, production quality and passenger information targets were met in 2018, with a drop in SSIs managed by SNCF Réseau in 2018.

SNCF Réseau's goal is to continue lowering SSIs and work accident frequency. The PRG seeks to reduce by half the annual rate of accidents with work stoppage between 31 December 2015 and 31 December 2020. To this end, an OHS managerial transformation (Dupont de Nemours approach) was launched in the production zone establishments.

Interventions will be further secured in 2019 via the use of digital tools, and work site safety will be reinforced through a

#### 4.3.2.2. Network maintenance: safety and innovation

Production in 2018 was heavily impacted by the adverse weather in the early year, followed by the consequences of the strike. Despite efforts to adapt, production was down compared to 2017. This lag, which concerns reprogrammable operations, has only been partially offset, particularly in regard to periodic catenary overhauls.

The renewal rate for aging infrastructures remains high despite the significant constraints mentioned above. Major efforts have been made to replace switches and crossings, initiated by the Vigirail programme, even though they fell below the 2017 level. Maintenance should be almost 98% completed all specialisations combined.

The "tightened" maintenance measures introduced in 2016 have been expanded to cover a larger operating scope. These reinforced maintenance operations put into action the feedback and recommendations relating inter alia to the Brétigny-sur-Orge, Denguin and Carbonne accidents. The goal is to accelerate the rate of replacement of certain obsolete components and ensure that the just-in-time principle is respected when failures are corrected.

The "rail" policy review in early 2018 led to the gradual inclusion of rail milling operations to remove surface layer defects responsible for geometrical flaws. In addition to improved stability, this process should extend rail life, translating into fewer rail sections needing replacement. Combined with the deployment of the rail line repair process

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(HWR) and the milling operations, the productivity generated will be in phase with the performance plan.

SNCF Réseau is actively pursuing its Operational Excellence programme to support economic performance. Now more than ever, innovation and digital transformation represent major strategic policies for SNCF Réseau and applications are numerous:

- The development and deployment of computer-assisted maintenance management software (CMMS) is continuing according to a specific schedule. Systematic preventive maintenance will be fully rolled out by the end of 2018. The monitoring of anomaly processing will be in place by Q1 2019.
- The use of measurement trains to automate and modernise network surveillance is growing (SIM – SURVEILLE). In addition to improving employee safety vis-à-vis railway risk, these trains should replace a certain number of manual inspections. Progress is still needed regarding the availability rate of these trains and the replacement procedures.
- The introduction of sensors at facilities and mathematical data modelling should gradually lead to predictive maintenance, thus reducing the incident rate, while boosting productivity.
- Roll-out of the new rail correction and welding technique, certified in 2015, is continuing. It reduces the duration of projects and traffic interruption times and prevents potential faults.
- The maintenance activities will be equipped with new digital applications in addition to those already set up in 2016 and 2017.

Network reliability improved in the dense zone, with the continuation of the Lyon rail hub special plan, itself inspired by the Ile-de-France reliability plan. In general, the Track Consistency Index has improved, even though the situation in some areas may be mixed.

By way of example, the Lyon rail hub reliability plan covers the sector between Sathonay and Grenay, as well as the lines adjacent to the Lyon centre. Extremely dense traffic is thus concentrated on an aging infrastructure. In addition to the planned investments, a special maintenance plan will extend to 2020. The goal is to mitigate the consequences of the infrastructure's obsolescence until the Network Operations Centralised Command project is in place, with track renewal now under way.

The treatment of vegetation remains a focal point and the outsourcing of operations in this area is continuing. The introduction of new processes, in partnership with specialised companies, should have a radical impact on the results.

### 4.3.2.3. Reduce accidents involving third parties

Responds to point **2**

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<sup>4</sup>) – safety can still be improved at certain dangerous points. Train collisions with unauthorised individuals on tracks, in stations or on railway lines, and accidents at level crossings are the two main causes of mortality on the network. The figures for 2018 are again positive, following a clear deterioration over the last three years, essentially due to collisions involving the presence of unauthorised individuals on the tracks or nearby.

In addition, by implementing structural adjustments to level crossings, upgrading pedestrian track crossings and promoting prevention among the general public (partnership with National level-crossing road safety day<sup>5</sup>), 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 detectors at level crossings, anti-intrusion mats, etc.).

At the same time, SNCF Réseau is continuing to invest heavily in equipment (fencing, improvement or elimination of level crossings, track crossing safety in stations, etc.). SNCF Réseau investments to improve national rail network safety break down as follows:

- €45 million to eliminate level crossings;
- €17 million to improve safety at level crossings in use (addition of a barrier or signals, improved signal visibility, etc.);
- €6 million to install new fencing.

INDICATORS	2018	2017	2016
Societal risk value (weighted number of fatalities and serious injuries per million km.train) (CSI)	0.119	0.208	0.182
Number of accidents involving people on the network (CSI):			
- number of persons killed (excluding suicides and suicide attempts)	40	94	80
- number of persons seriously injured (excluding suicides and suicide attempts)	30	58	48
- number of suicides	289	295	314
Number of level crossings registered in the national safety programme that were eliminated	4	5	5

CSI: Common safety indicators

### - 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 2017-2018 academic year, more than 185,000 young people had their awareness raised by 560 school volunteers, 154 of whom were SNCF Réseau employees.

INDICATORS	2018	2017	2016
Number of school visits	7,860	9,342	10,490
- of which number of visits by SNCF Réseau school volunteers	1,890	1,599	1,996
Number of SNCF Réseau school volunteers (nb)	154	147	127
Number of young people who received awareness information from SNCF Réseau school volunteers (from Sept. to Sept.) (nb)	185,000	228,408	246,300

### 4.3.3. Secure our infrastructure in the face of climate change

Responds to point **4**

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 greatest. Confronted with extreme weather events, the major challenges of SNCF Réseau involve adaptation and improved

<sup>5</sup> Further information at the website dedicated to road safety at level crossings: [www.securite-passageaiveau.fr](http://www.securite-passageaiveau.fr)

<sup>4</sup> CGDD: General Commission for Sustainable Development



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:

- 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.

Accordingly, SNCF Réseau has introduced innovative solutions to reduce infrastructure vulnerability, by adapting to the new environmental restrictions, and thus improve traffic regularity:

- surveillance cycles: to avoid any deterioration due to weather conditions, specific surveillance is carried out during track work; the TOUTATIS (weather alert field inspections) project is being rolled out;
- heat inspections: to anticipate periods of high temperatures, rail tracks are closely monitored to detect and correct the least installation or maintenance problem;
- weather inspections: to avoid any deterioration due to bad weather, maintenance workers closely monitor certain works to detect the least problem;

To reduce the vulnerability of its infrastructure, SNCF Réseau conducted detailed vulnerability analyses in 2016, 2017 and 2018. 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 2019, improved business continuity plans will have been drafted for the entire country.

With respect to fire risk, SNCF Réseau has defined a general safety policy for all its assets and a specific fire safety policy for the network’s technical facilities (switching stations, etc.).

Several studies have been conducted by researchers and specialised firms over the past two years. Backed by these initial assessments and the mini-lab work in 2018, SNCF Réseau is considering a new policy with respect to climate change. The objective is to analyse the intrinsic fragilities of assets in the face of climate uncertainty and to define the broad strokes of a roadmap for adaptation, as well the issue’s governance and management.

The policy’s objective is to secure the network’s resistance to climate change; therefore, the key performance indicator will be the decrease in the percentage of train delays in minutes due to bad weather out of total causes that can be attributed to infrastructure management.

INDICATORS	2018	2017	2016
4 Percentage of train delays in minutes due to bad weather out of total causes that can be attributed to infrastructure management (%)	19.14	13.91	12.6
4 Number of business continuity plans (BCP) drafted	3	1	1

#### 4.4. ENVIRONMENTAL CHALLENGE: REDUCE OUR ECOLOGICAL FOOTPRINT AND CONSOLIDATE OUR ENVIRONMENTAL ASSETS

##### 4.4.1. Optimise resources and recover materials as part of a circular economy approach

Responds to point 10

##### 4.4.1.1. 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.).

With respect to its wood consumption for sleepers, switches and crossings, SNCF Réseau committed to an eco-responsible tropical timber purchasing strategy in 2018 to preserve the tropical forest, its fauna and its populations. SNCF Réseau has therefore set up a risk assessment system for timber imports. This “Due Diligence” approach that is rolled out across the company strikes a balance between industrial, environmental and social performance while creating value:

- environmental: protection of biodiversity and the fight against poaching and climate change through FSC (Forest Stewardship Council) eco-certification and the approval of new wood species;
- social and societal: respect for local populations and improvement of their quality of life;
- economic: total gain of €300,000/year thanks to the stoppage of chemical pressure impregnation for wood and the set-up of new logistics flows.

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	2018	2017	2016
Quantity of resources purchased, by type:			
- Wooden sleepers (units)	389,107	370,600	374,245
- Concrete sleepers (units)	1.45	1.53	1.50
- Rails (tonnes)	177,650	175,904	154,000
- Ballast (Mt)	1.87	2.30	2.35
- Copper overhead lines (tonnes)	1,616	1,750	1,657
- Paper (tonnes)	na	1,430	1,412
Water consumption of tertiary and industrial sites (M m <sup>3</sup> )	1.9	2.5	2.77

##### 4.4.1.2. 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:

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- 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 three 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 to this new approach and assisting the company's employees.

Receipts from the recovery of items removed from tracks amounted to over €45 million at the end of 2018, up by +20% in relation to 2017. This is due to the mobilisation of all players concerned, from collection in the work phase to the actions undertaken by purchasing departments. A further step has been reached with the commissioning, on a trial basis, of a single window for items removed from tracks. The goal is to maintain the recovery performance and energise rail reuse. The challenge is to recover materials capital by automating and securing internal reuse.

The roll-out will begin with two national segments (ballast and rails) and four maintenance facilities: Paris-Saint-Lazare, Alpes, Centre and Nord-Pas-de-Calais and Haute-Picardie.

INDICATORS	2018	2017	2016
10 Sales of end-of-life materials (€m)*	45.5	37.5	27.8
Total quantity of hazardous waste produced excluding wooden sleepers and asbestos (tonnes)	1,375	1,768	2,680
Share of re-used rails (%)	2.7	0	3.5
Share of recycled rails (%)	97.3	100	96.5
Share of ballast rapidly re-used (%)	30 to 50	30 to 50	30 to 50
Volume of asbestos (tonnes) removed from rail installations (signalling)	203	263	76
Volume of wooden sleepers recycled for energy purposes (tonnes)	65,187	67,753	78,303

\*2016: -13% for scrap and -11% for copper price indices

### 4.4.2. Biodiversity policy: Respect natural ecosystems as a common good

#### 4.4.2.1. Protection of natural sites

Railway lines can modify the ecological consistency of ecosystems and alter exchanges between species. This is why SNCF Réseau is particularly concerned by the challenge of protecting biodiversity, beyond the strict application of regulations.

SNCF Réseau applies the avoid / reduce / offset approach to its project design, from beginning until completion, and beyond in the sustainable management of offset sites, through a repeated process of study and consultation with field specialists, involving increasing scales of accuracy. The company's first priority is to avoid impacts on the most vulnerable natural settings.

Major maintenance operations carried out on existing works can serve to re-establish transparency. Accordingly, specific works (large fauna structures, small fauna passages, amphibian tunnels, fishways, etc.), dedicated spaces (ponds, hedges, nesting boxes for species of bats and birds, dry-stone walls, etc.), and major actions such as the removal of stork nests from catenary poles are some of the achievements that have made

infrastructure more receptive to ecological and sedimentary continuity.

The areas alongside railway lines can also support ecological corridors as many species find refuge, pass through or find a favourable environment at some point in their life. With respect to vegetation, many species are developing on the edge of railway lines, hence the gradual shift in vegetation maintenance practices towards an adaptive management of these areas to foster biodiversity.

In line with the actions conducted over several years, SNCF Réseau has mobilised for the launch of Act4Nature, a voluntary undertaking of 65 French companies working for biodiversity. This initiative, organised by the Businesses for the Environment association and supported by some twenty partners (institutional, scientific and NGOs,) was an occasion to sign common undertakings and present quantified and planned individual commitments and pledges for new action. The meeting was held in light of the Convention on Biological Diversity (COP 15) and the IUCN's Global Congress, which will take place in 2020.

INDICATORS	2018	2017	2016
Number of restored ecological continuities for water courses out of the 110 that are regulated – cumulative	8	7	6

#### 4.4.2.2. Development of the partnership commitment and contribution to knowledge

In 2018, SNCF Réseau consolidated its partnerships with key environmental stakeholders:

- 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. A regional partnership was signed with FNE Ile-de-France.
- 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). Training and awareness actions were organised for employees.
- 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 improve the management of wildlife contiguous to railway premises.
- 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 Réseau actively contributed to 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.

Furthermore, SNCF Réseau represents the linear transport sector's infrastructure managers on the National Biodiversity Committee.

INDICATORS	2018	2017	2016
Number of management agreements with green space managers (nb) - cumulative*	59	44	48
Surface area concerned (ha) - cumulative*	484	192	2,006

\*2016: Including Public-Private Partnerships (PPP)

#### 4.4.3. Reduce our greenhouse gas emissions and improve energy efficiency

Among all the methods for transporting goods and persons across the country, the national railway network provides a more sustainable form of alternative mobility since it is less dependent on fossil fuels. With less than 1% of CO<sub>2</sub> 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 green bond issues, SNCF Réseau prepared a methodology to assess the carbon impact of rail infrastructure investments financed by its green bonds. The calculation method that was used measured:

- the carbon footprint of network renewal and development projects;
- CO<sub>2</sub> emissions avoided by maintaining existing lines or creating new ones, due to a modal shift to trains for users and freight.

In 2018, given the particular context of the new railway pact and pending the terms of the French State's absorption of a portion of the SNCF Réseau debt, the company was unable to access the public bond market and therefore did not issue green bonds. This decision does not call into question SNCF Réseau's determination to issue green bonds on a recurring basis and become a major player in this market.

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 greenhouse gas emissions.

In 2018, SNCF Réseau reaffirmed 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.

##### 4.4.3.1. Energy policy: Contribute to energy transition

###### - Renewable energy production:

Spurred by SNCF Immobilier, SNCF Réseau and the SNCF Group developed a specific governance policy in 2018, whereby the company is committed to renewable energy production. SNCF Réseau has confirmed its determination to systematically develop its available land for the production of solar energy:

- construction of ground solar power plants on undeveloped land;
- construction of ground solar power plants on developed land: parking shelters, rooftops, station platforms.

In July 2018, an agreement was signed under which SNCF Immobilier pledged to develop solar energy, as set out in the SNCF land and real estate development policy and participate in the creation of own consumption projects. The signing took place in the presence of the Secretary of State of the French

Ministry for an Ecological and Inclusive Transition and the leaders of major industrial groups.

SNCF Immobilier has thus committed to solar via pledges intended to:

- identify and characterise relevant land plots with a minimum surface area of 2 ha, in order to develop solar projects and provide a vision of solar energy production and roll-out in the mid-term;
- promote the deployment of solar energy projects on eligible land (technically, administratively and financially) with a minimum surface area of 2 ha;
- Systematically examine photovoltaic technologies for any major new building, rehabilitation or extension project and the gradual installation of rooftop solar panels on the main permanent buildings for SNCF activity. This is the case for the two new SNCF Réseau training centres. Own consumption should be privileged wherever possible provided that the net present value is reasonable.

In 2018, SNCF Réseau supported the realisation of several solar power projects, specifically the Halle de Valence Infralog, the Saint-Lazare main passenger hall, the SOCRATE building of the Haut-de-France Network Operations Centralised Command and the car park of the Nîmes-Pont-du-Gard station. In 2019, SNCF plans to analyse the technico-economic feasibility of installing photovoltaic units on its rail lines.

At the end of 2018, SNCF Immobilier also delivered two new buildings for the East European line Infrapôle (equipment and maintenance centre) in accordance with RT 2012 standards, whose design improved employee working conditions. Particular care was devoted to lighting for night shifts (Wellness approach).

###### - Energy sobriety

In 2018, SNCF Réseau continued to reduce its energy consumption through the following measures:

- ongoing programme to replace station platform lights with LED lights;
- pursuit of 2013-2020 master plan for traction units, which aims to ensure the consistency of current and future investments in SNCF Réseau's fleet of locomotives and towing equipment. Its objective is to achieve the proper sizing of works train fleets, 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);
- enhanced environmental performance driven by the modernisation of the diesel fleet (reduction of NRD<sup>6</sup> consumption, compliance with NO<sub>x</sub>, HC and PM emission thresholds).

With respect to the SNCF Réseau vehicle fleet (15,931 vehicles), France's seventh-largest, the optimisation policy is focused on lowering fuel consumption by replacing 80% of light vehicles with new vehicles with CO<sub>2</sub> emissions below 100g CO<sub>2</sub>/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 2018, the SNCF Réseau fleet comprised 248 electric vehicles, i.e. 1.56% of its total fleet. The project to equip vehicles with telematic control units was validated by the Executive Committee in February 2018 and is now being rolled out, which will optimise fleet use and provide potential vehicle pooling solutions. SNCF Réseau

<sup>6</sup> NRD: Non-road diesel

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

INDICATORS	2018	2017	2016
Electricity losses specific to the electrified rail network (GWh)*	601	673	747
Share of electric traction trains in circulation, all railway companies combined (%)	78	78	78
Energy consumption of tertiary and industrial site buildings:			
- electricity (GWh)	390	326	342
- gas (GWh)	142	141	133
Fuel consumption of the vehicle fleet (ML)	18.3	18.5	18.7
Fuel consumption of works trains and locomotives (ML)	10.0	11.0	11.9

\*Since 2017: decrease in loss rate from 10% to 8.5% at the request of ARAFER in its opinion on the 2017 service timetable

### 4.4.3.2. Carbon policy

SNCF Réseau is pursuing its work to measure the carbon impact of its network renewal and development projects.

In 2018, the company completed the measurement of its works activity through a carbon assessment of a switches and crossings renewal operation. Using a continuous improvement approach and in accordance with the commitments undertaken by SNCF Réseau, the results of this analysis will specify the green bond valuation method.

SNCF Réseau also produced its 2018 Greenhouse Gas Emissions Report. This practice is carried out every four years and measures the company's emissions for a baseline year. In 2018, SNCF Réseau surpassed its regulatory obligation by measuring its scope 3 GHG emissions in addition to scopes 1 and 2. This analysis revealed that emissions relating to work site materials and waste represented over 55% of SNCF Réseau's total emissions.

- 4% for service vehicle fuel;
- 2% for works train, locomotive and towing gear fuel;
- 4% for materials/waste consumption involving maintenance and development projects.

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

INDICATORS	2018	2017	2016
Total GHG emissions of the SNCF Public Rail Group (taken from the Greenhouse Gas Emissions Report scope1+2) (kt eq CO <sub>2</sub> )	1,058	1,056	1,056
Total GHG emissions of SNCF Réseau (calculated for the actual scope1+2) (kt eq CO <sub>2</sub> )*	167	170	176
Tonnes of CO <sub>2</sub> avoided thanks to the rail system (taken from the Greenhouse Gas Emissions Report) (kt eq CO <sub>2</sub> )	10,880	9,872	9,872

### 4.4.4. Minimise the footprint of activities on water, air and soil, and control discharges

Responds to point 6

#### 4.4.4.1. 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). Programmes are thus better understood, management is better adapted, and the related work and costs are less consequential. 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.

SNCF Réseau is nevertheless committed to setting the example in its choice of practices. Accordingly, it tests methods and arrangements aimed at limiting the use of agrochemicals, such as the laying of anti-vegetation mats under tracks or eco-pasture on the edge of tracks. The SIGMA application (geographical information system for vegetation management), which lists protected zones covering drinking water catchment areas and non-treated 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 solutions used contain lower doses than those recommended by the manufacturers.

New techniques and alternatives to the use of glyphosate are currently being tested or studied:

- in the mid-term, the use of alternative herbicides based on new biocontrol products, optimised processing methods to reduce consumption (surveillance trains) and an array of solutions adapted to certain situations: select sowing techniques for sidings and tracks, geotextiles, shearing robots for high-speed tracks, etc.;
- in the long term, herbicide-free alternatives in the form of new technologies such as electric wave and pulse.

INDICATORS	2018	2017	2016
Share of rail installations (NRN, sites) where there are initiatives to reduce or eliminate agrochemicals (%)	4.3	3.50	2.97

#### 4.4.4.2. Search for alternatives to creosote

In order to respond to the European Parliament Regulation on biocidal products of 22 May 2012, and to protect the environment and human health, SNCF Réseau has pledged to seek alternatives to creosote for wooden sleepers, where track technical restrictions prevent the use of concrete sleepers.

As part of this project, SNCF Réseau has created and steered the first European Network of Creosote Users: grouping some forty manufacturers and twenty European countries who share feedback on creosote alternatives from a technical, toxicological and environmental perspective. The goal is to create a European market that encourages the chemical industry to invest further in R&D in order to find new alternatives that are more technically efficient, less harmful to human health and the environment and economically viable.

#### 4.4.4.3. 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.

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

INDICATORS		2018	2017	2016
Total environmental provisions (€m)		181	167	169
Number of major environmental incidents		20	14	18
6	Percentage of industrial sites (EIV, C2MI) to have implemented regular monitoring of discharges (%)	88	88	88

#### 4.4.4.4. 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.

In 2018, an internal label was created: the Continuous Improvement and Traceability Plan for the Environment (PACTE), which is being gradually rolled out in the production plants.

The objective is to incite all SNCF Réseau establishments to obtain the Bronze label by the end of 2020.

INDICATORS		2018	2017	2016
6	Number of PACTE programme establishments with the Bronze label	1	-	-

#### 4.4.5. Integrate environmental performance into business practices

##### 4.4.5.1. Employee awareness-raising and training regarding environmental challenges

SNCF Réseau's employees are regularly informed of sustainable development issues through regular and 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 areas such 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		2018	2017	2016
Number of SNCF Réseau employees trained in environmental issues		151	124	113
Number of training hours for SNCF Réseau employees on environmental issues		1,464	1,233	1,305

##### 4.4.5.2. Eco-design approach

SNCF Réseau has adopted a determining 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.

At the end of 2018, there were approximately 50 eco-design projects under way in various phases. Station accessibility projects are the most numerous. The aim is to monitor the performance of these projects and increase their number every year (30 in 2017). Certain validation documents for various project phases and methodological guides already include a paragraph on eco-design.

##### 4.4.5.3. SNCF Réseau innovation, backed by responsible modernisation

Innovation projects are grouped according to major goals such as reducing 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 2018, the Innovation Department's project accelerator (the Learning to Innovate as a Network programme (AIR)) completed the innovative project support system.

With the AIR programme and in partnership with start-ups or social and solidarity enterprises such as SIMPLON, SNCF Réseau is exploring issues regarding the Internet of Things, data science, artificial intelligence, maintenance robotics, and paperless processes. For example:

- touch screen table enabling several persons to view and enter data at the same time;
- fleets of shearing robots to replace the use of glyphosate;
- sensors and an interface to reduce the environmental impact of battery use and waste at work sites;
- an application to improve rail cleaning operations using scrubber trains.

INDICATORS		2018	2017	2016
Number of research and applied research projects		183	129	126
Number of research and applied research projects related to CSR issues		33	29	21
Total research and applied research investments (€k)		13,682	13,772	12,773
Total research and applied research investments related to CSR issues (€k)		4,226	2,754	2,693

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### 4.4.5.4. The Environmental Authority, witness of our project business practices

The role of the Environmental Authority of the General Council of the Environment and Sustainable Development (EA GCESD), created in 2009, is to:

- decide whether or not to order an environmental analysis for an investment project through a case-by-case review process;
- issue an opinion on the quality of the environmental analysis and the information made public and recorded in railway project impact studies. Its opinions are published and appended to public inquiry records.

In 2018, the number of rail projects requiring referral to the EA GCESD declined sharply, for both case-by-case decisions and impact study opinions. This trend had already begun in 2017.

It is explained by the combination of multiple technical, administrative and political parameters that acted on rail project production: the regulatory simplification reform covering project environmental assessments that came into effect in 2017, the ongoing investment shift towards network renewal often falling outside the environmental assessment scope, preliminary discussions on the new mobility law and, to a lesser extent, the company's internal reorganisation (Nouvel'R).

INDICATORS	2018	2017	2016
Number of impact analysis opinions issued by the EA	3	8	18
Number of case-by-case reviews filed with the EA	10	14	24
Number of case-by-case reviews resulting in an EA decision not to conduct an impact analysis (%)	3	8	20

### 4.5. SOCIAL CHALLENGE: IMPROVE OUR SOCIAL PERFORMANCE

#### 4.5.1. 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

INDICATORS	2018	2017	2016	
Total number of employees excluding work-study students and assisted contracts (actual workforce)	54,097	54,299	54,476	
Breakdown of employees by category (nb)	Executives	764	732	692
	Managers	14,089	13,704	13,295
	Supervisors	20,636	20,584	20,747
	Labourers	18,608	19,279	19,742
Geographical employee breakdown (nb)	Ile-de-France	16,923	16,791	16,440
	Regions	37,174	37,508	38,036
Breakdown of employees by type of contract (nb)	Open-ended contracts	53,902	54,046	54,187
	Fixed-term contracts	195	253	289
	Work-study students	1,978	2,074	2,215
	Assisted contracts	18	24	41
Total employees by age bracket (5-year intervals) (nb)	- under 26	3,438	3,898	4,095
	- from 26 to 30	7,562	7,689	7,352
	- from 31 to 35	7,885	7,579	7,350
	- from 36 to 40	7,842	7,731	7,454
	- from 41 to 45	8,033	8,241	8,200
- from 46 to 50	7,535	7,133	6,833	

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 H:00 (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".

#### - Mentoring

The experimental "Mentoring approach" programme was implemented in January 2017 for the Operations & Production Directorate managers in Ile-de-France, as part of the measures to enhance the professional skills of operational managers.

The success of this first experience led to the approach being pursued in Ile-de-France and extended to the Atlantique scope in 2018, as part of the Nouvel'R roll-out to support decentralised and accountable management on the part of local and operating unit managers (DPX/DU). This will develop a client and results-based strategy for employees and the ability to accompany the transformation of SNCF Réseau with a systemic vision.

Within line management - from Director to DPX - the Mentoring approach will develop a support and accountability attitude, as well as hierarchical and crosswise cooperation in order to foster transversal relations between the business lines and regions.

Mentoring will help managers model the three SNCF Réseau values by exemplifying an open, responsible and cooperative attitude.

INDICATORS	2018	2017	2016
Time spent on operational management for LMs (%)	na	41.8	39.5

### 4.5.2. Foster employability

Responds to point **5**

#### - Workforce

In 2018, SNCF Réseau hired 2,079 new employees.

This massive recruitment drive is intended to deal with the rail network's renovation, modernisation and development challenges in relation to the major projects, particularly in Ile-de-France. It also responds to the need for generational renewal due to the significant volume of retirements. At the end of 2018, the SNCF workforce stood at 54,097 employees.

- from 51 to 55		6,672	7,090	8,094
- over 55		5,130	4,938	5,098
5	Total number of recruitments (nb of open-ended contracts)	2,079	2,832	3,086
	- of which permanent status	1,435	1,972	2,260
	- of which contractual	644	860	826
	Number of work-study students recruited under open-ended contracts	523	633	702
	Total number of redundancies (nb of open-ended contracts)	174	151	95
	Number of employees based on work schedules (A for office work schedule and B+C for shift work schedules including weekends and nights)			
	A	8,170	8,047	8,115
	B+C	45,927	46,252	46,361
	Gross employee benefit expense (€m)	3,414	3,440	3,367
5	AEC: Average Employee Cost	63,113	62,886	61,786
	Total of the ten highest salaries (€m)	2.5	2.4	2.3
	Sick leave rate (%)	4.25	3.76	3.81
	Number of days absence per employee	9.69	9.45	9.64

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### - Training policy

For SNCF Réseau, competency development and transformation to prepare tomorrow's High-Performance Network is imperative. It represents a challenge that is central to the Nouvel'R project, in that it seeks to reinforce the expertise and professionalism of the men and women who have enriched the company and support them as they adapt to change in their business lines.

It is in this context that the SNCF Réseau Training Department pursued its modernisation project. By grouping the dedicated employees into a single Department, it confirms its ability to define the national strategies needed to prepare the future by developing inter-Department synergies, employability and career path security.

It has provided itself with the resources necessary to transform and modernise its training system by initiating a true pedagogical revolution on terms of both content - training employees throughout their career paths - and methodology by using and anticipating technological innovations.

To achieve these goals, the investment budget allocated to training remained significant amidst the ever-increasing need for generational renewal. Over 2.3 million hours were thus dedicated to initial and continuous employee training in 2018.

INDICATORS		2018	2017	2016
5	Number of training hours during the year (thousand h)	2,401	2,641	2,472
	Share of payroll dedicated to training (%)	7.33	7.65	7.48

### - Labour relations

Fiscal 2018 was marked by major conflicts in the spring, as trade unions voiced their opposition to the rail reform law.

The professional elections took place by electronic vote from 17 to 22 November 2018 based on a breakdown of six of SNCF Réseau Labour and Economic Committees corresponding to the company's organisation, as defined under the Nouvel'R project implemented in July 2018.

The task in 2019 is to set up single employee representative bodies and restore a new labour dialogue by sharing the economic and human challenges we face.

INDICATORS		2018	2017	2016
	Number of Public Rail Group agreements signed during the year	5	4	4
	Number of strike notices	647	241	255

### - Incentives and compensation

In 2018, SNCF Réseau management negotiated a new incentive agreement with the trade unions. It covers the entire workforce for the 2018-2020 period.

The agreement reflects the desire to recognise everyone's contribution to achieving the objectives of SNCF Réseau. It is based on the success of three criteria:

economic results reflected in the operating margin level;

industrial performance using a criterion covering network availability and quality, based on an indicator listing incidents and faults at facilities;

social performance through the quality of work life measured by trends in the level of responses to the Allure internal satisfaction survey.

The annual negotiation roundtable on wage increases did not result in an agreement between management and the trade unions. Following the discussions, management nevertheless increased the bonus paid to low wage earners from +0.7% to

+1% of their remuneration over and above the individual increases.

### 4.5.3. Promote the access of women to all jobs and fight against discrimination

#### - Promote professional and gender equality

Fiscal 2017 was a landmark year for SNCF Réseau in terms of the professional equality commitment.

Fiscal 2018 was a year of sharing and opening with the realisation of Chairman Jeantet's commitment to establish a gender equality benchmark, with organisations such as the Police Nationale or the Sapeurs-Pompiers where few women are employed.

It was also a year of coordination and implementation regarding actions to change mentalities and develop an inclusive managerial culture, guarantee universal and career-long professional equality, and foster the recruitment of women.

Indeed, based on the company agreement, the Manifesto, and the commitments of Executive Committee members and managers, a professional gender equality road map has been created collectively with a group of players responsible for the issue.

By way of example, this road map has:

- developed business line presentations for female audiences in Pôles Emplois (employment centres), and in schools;
- created new personal protective equipment adapted to female morphology, a first for French industry;
- sponsored professional equality training as part of an Ecole des Mines ParisTech partnership with secondary schools;
- offered regular "gender equality cafés" to raise awareness among employees, and also an opportunity to discuss the employee parent guide in order to reconcile the work/life balance;
- organised a gender equality week where awareness was raised in institutions and GIRLS' DAY, an annual event that promotes SNCF's technical professions with female students. These two events were high points in terms of addressing and communicating the issue of gender equality;
- set up an awareness workshop for the "Gender equality in play" managers within all the Management Committees to prevent discrimination and fight irresponsible behaviour.

SNCF Réseau plays a major role in numerous gender equality initiatives. Among them:

- The development of an Operational Readiness for Employment programme. In partnership with Pôle Emploi and renewed annually since 2012, this programme offers access to signalling technician positions to job-seekers who do not possess the usual prerequisites, following refresher training provided at GRETA (Association of public education institutions for adults).
- Participation in "Equality and Competencies" meetings. Organised in cooperation with the regional authorities and local employment players, these meetings are intended to directly identify candidates in disadvantaged neighbourhood employment areas.



- Use of simulation methods for recruitment. These methods can expand candidate searches by identifying

the abilities necessary for the job offer. They fall outside the usual recruitment criteria of experience and education.

INDICATORS	2018	2017	2016	
Proportion of women in total workforce and by category (%)	Overall	12.9	12.6	12.1
	Executives	16.0	14.5	14.0
	Managers	20.2	19.9	19.0
	Supervisors	12.8	12.6	12.0
	Labourers	7.3	7.3	7.0
Proportion of men in total workforce and by category (%)	Overall	87.1	87.4	87.9
	Executives	84.0	85.5	86
	Managers	79.8	80.1	81.0
	Supervisors	87.2	87.4	88.0
	Labourers	92.7	92.7	93.0
Percentage of women recruited (%)	16.3	16.2	14.8	
Percentage of men recruited (%)	83.7	83.8	85.2	
Ratio of women managers recruited at SNCF Réseau (%)	30.7	32.7	39.0	
Ratio of women in governance bodies (%)	36	35	42.0	
Ratio of women in operational management (DET, DT) (%)	10.9	10.8	11.3	

### - Disability and employment

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

To further extend this integration process, efforts have focused on the following issues:

Recruitment:

- pursuit of the "Hantrain" programme for the catenary and rail switching trades so that the disabled can receive training and find employment;
- preparation of an audit/assessment covering recruitment of the disabled and definition of a positive approach for the establishments and the company pursuant to the regulatory requirement (completion scheduled for Q1 2019);
- awareness and advisory initiatives for recruitment players, particularly involving questions relating to adaptation possibilities for work stations and the professional environment;
- support in recruitment drives, particularly in regard to the search for candidates.

Employee retention

- work on specific issues that are innovative and promising to ensure an optimum adaptation of the company's facilities (training, new technologies, etc.). The objective is to raise awareness regarding various disability situations, their problems and the available compensation systems, and also to promote and communicate the work collective's input;
- improved inclusion of the disabled by better anticipating the arrival or return of disabled workers: availability letter sent to all employees newly recognised as disabled (new hire or employee already in place).

Awareness/Communication:

- pursuit of the legal work, particularly the drafting of new legal fact sheets, GDPR impact on the processing of disability data, legal developments, etc.

As in 2017, the various developments in 2018 highlight the diversity of needs and the responses provided.

INDICATORS	2018	2017	2016
Number of disabled workers	2,048	2,046	2,074
Employment rate for disabled workers (%)	3.79	3.64	3.67

### - 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 in-house, mentoring, co-development, etc.

#### 4.5.4. 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.

In 2018, as part of the Nouvel'R programme, SNCF Réseau created a unit within the HR Department dedicated to change management, work life quality, and furthering the commitment.

The goal is to develop motivation and commitment at the work place, by relying on SNCF Réseau's culture and stressing primary prevention, work management, and the handling of daily "irritants" through a work dialogue in the various groups. It is a matter of reconsidering work organisation, operating processes and roles, in the name of greater collective efficiency and in line with SNCF Réseau's values: Accountability, Cooperation, Openness. Through the QWL and psychosocial risk prevention approach, the challenge is to develop HR players and line management in the field of change management, using a methodological base to consider the human factor in change projects. The will follow the example of "Anticipating the human issue", a guide prepared by the Public Rail Group's HR Department with representatives from each EPIC.

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In partnership with the French national association for the improvement of working conditions (ANACT), a study to assess QWL practices is scheduled for early 2019 in order to set priority action recommendations for the SNCF Réseau scope in liaison with the Allure survey results.

### - Allure survey

In a context of major transformation at SNCF Réseau, the Allure survey is a critical part of the regular assessment of employee satisfaction. Up until 2017, half of the Group's employees were surveyed alternatively each year. In 2018, the Allure survey became 100% digital, focusing on all employees in order to better assess their feelings regarding quality of work life, working as a group, and the value of the managerial relationship, and more generally their faith in the future and its prospects.

A privileged tool to sound out the work relationship and an employee satisfaction barometer, the Allure survey can provide an estimate of employee commitment, a key success factor for the Nouvel'R transformation project.

Allure is also an employee dialogue and steering tool in that it enables communication and practical steps through the deployment of action and progress plans at the local, regional and national level once the results have been measured and analysed and the priorities identified.

INDICATORS	2018	2017	2016
Score on the quality of work life in the Allure survey (out of 100)	66	68	67
Score on the working conditions question (out of 100)	72	73	75
Score on the work-life balance question (out of 100)	68	68	69

### - Prevention of psychosocial risks

Pursuant to the employer's yearly obligation to update the Psychosocial Risk Single Document, each SNCF Réseau operating unit assesses psychosocial risks with the aid of a 25-question grid addressed to employee groups potentially exposed to the same risks by virtue of their business lines. 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 Pensioner 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	2018	2017	2016
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, fatigue, 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	2018	2017	2016
Number of employees who telecommute	2,490	1,061	596

## 4.6. SOCIETAL CHALLENGE: REINFORCE OUR REGIONAL INVOLVEMENT

### 4.6.1. Putting regional dialogue at the heart of our practices

Responds to point **9**

As a pivotal player in the French rail system, SNCF Réseau contributes to regional planning and must naturally be responsive not only to its clients but to all its stakeholders: local residents, passengers, elected representatives, environmental associations, economic players, etc.

Far from being a constraint, debate and responsiveness for SNCF Réseau represent an opportunity to anchor rail transport in the regions in a positive and responsible manner and thus contribute to their development. This voluntary stance in terms of dialogue and consultation is reflected in various actions:

#### - Creation of the National Stakeholders' Committee

On 26 June 2018, SNCF Réseau created a National Stakeholders' Committee. It brings together association presidents, company directors, elected officials and academics. This committee, a veritable think tank, seeks to posit strategic directions for SNCF Réseau and reflects the company's will to further open itself to better share the challenges faced by rail.

Central to the discussions: regional planning, network modernisation, the environment, the energy transition, the business model, etc.

The committee meets three times annually and will be introduced in each of the regions in 2019.

#### - Consultation at SNCF Réseau: know-how and a will to innovate

Following the development of new line projects in the 90s, and no less than 14 public debates organised under the aegis of the French National Commission for Public Debate, SNCF Réseau has implemented an ambitious consultation policy, via a professional network of consultants, which is now recognised as a major asset for the company. This policy is evidenced by SNCF Réseau joining the public participation charter in 2017, which was promoted by the French Ministry for an Ecological and Inclusive Transition, and the drafting of an application

guide for the charter in 2018, intended for the operational players.

This consultation culture has been developing within the company for over 15 years. Through numerous development and modernisation projects, the network is building and advancing by integrating the knowledge and daily practices of residents, users and local players in order to respond to regional needs.

This openness is crucial to project management. Be they voluntary or legally required, SNCF Réseau organises consultations to allow public participation (passengers, local residents, businesses, farmers, citizens, etc.), from the upstream strategic definition of projects to their completion. To this end, the interactive public participation map is available on the [www.reseau.sncf.com](http://www.reseau.sncf.com) website.

These consultations are based on two pillars: public information and mobilisation and constructive and diversified participation.

In 2018, SNCF Réseau conducted 11 public consultations. The consultation on the new Bâle-Mulhouse airport rail link was particularly constructive, in that the airport hub's employees were closely associated with the process. In 2018, the lower number of consultations is explained by a pause in major transport infrastructure projects, particularly in rail, and the definition of new mobility strategies (the draft mobility law should be adopted in the first half of 2019).

In addition to consultation time, SNCF Réseau is engaged in a continuous dialogue with regional players (local elected officials, State and local authority technical services, associations, etc.) and local exchanges in response to resident requests, the management of track-side vegetation being an example.

INDICATORS		2018	2017	2016
9	Number of consultations	11	32	35
	- of which number of voluntary consultations	5	8	17
Number of partnerships with national and local associations with respect to sustainable development		47	85	104

#### 4.6.2. Actively contribute to regional economic and societal development

With 30,000 km of rail lines, SNCF Réseau hopes to further impact the economic and societal development of corridor regions. This societal commitment on the part of the company is reflected by partnerships and the support of projects with local players including those of the Social and Solidarity Economy. SNCF Réseau is developing integration projects, contributing to the SNCF Foundation's initiatives and rolling out a solidarity purchasing policy in very close proximity to the regions.

##### 4.6.2.1. Through solidarity purchasing and the SNCF Foundation

###### - Solidarity purchasing

SNCF Réseau drives local development through a purchasing policy that favours SMEs. In 2018, between 25% and 30% of the purchases of SNCF Réseau were carried out with local SMEs. An "SME desk" was set up on the website to enable SMEs to acquaint themselves with 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, ESATs<sup>7</sup>), and integration

projects with occupational integration companies, intermediary associations and ETTIs<sup>8</sup>.

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.

In 2019, the Purchasing Division set up two Operational Excellence working groups to significantly optimise the use of integration and the sheltered and adapted work sector in SNCF Réseau contracts, from the purchasing process to payment. A collective effort between the various internal and external stakeholders of SNCF Réseau enabled the introduction of innovative and workable solutions to multiply solidarity purchases.

###### - Integration projects

As part of its public service mandate, SNCF Réseau is committed to employment solidarity actions, particularly via social and professional integration.

The green integration projects led by SNCF Réseau meet three objectives:

- offer the unemployed assignments that are adapted to their professional project, tailored socio-professional assistance, and training to enrich their search for a permanent job;
- enhance the asset base by maintaining and thus preserving facilities;
- preserve the quality of life of local residents by improving the comfort and cleanliness of outdoor areas so that residents can benefit from a better living environment.

In 2018, 17 integration projects were organised in Île-de-France on SNCF Réseau railway premises. 160 people received help in finding employment, around 100 people resumed an active working life by obtaining a job or enrolling in diploma-based training.

INDICATORS		2018	2017	2016
9	Total SNCF Réseau solidarity purchases (direct and indirect) (€m)	13.5	10.1	6.9
Equivalent number of jobs obtained by the protected and adapted sector		101.14	80	61
Number of integration projects		na	40	28
Number of assisted contracts generated by integration projects		na	146	118
Number of hours of social integration achieved through social clauses (h)		330,000	227,766	148,650

###### - SNCF Foundation

SNCF Réseau is a founding member of the SNCF Foundation,<sup>9</sup> which changed its status in 2016 to become that of the SNCF Group as a whole. It supports projects in three areas aimed at promoting a more harmonious society, namely education, culture and solidarity via partnerships or calls for projects. Its Chairman is Patrick Jeantet, Chairman of SNCF Réseau.

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

<sup>7</sup>ESAT: centres and aid services for work

<sup>8</sup>ETTI: temporary work integration enterprises

<sup>9</sup>SNCF Foundation website: <https://www.fondation-sncf.org/fr/>

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In 2018, 580 SNCF Réseau employees engaged in skills sponsorship initiatives and 135 association projects supported by employees received aid from the SNCF Foundation.

INDICATORS	2018	2017	2016
SNCF Réseau payment to the SNCF Foundation (€k)	500	500	500
Number of associations by the SNCF Foundation	942	1,119	984
Number of SNCF Réseau employees who participated in skills sponsorship	644	542	330

### 4.6.2.2. Through its property and real estate activity

#### - Disposals and participation in the national housing policy

SNCF Réseau carried out 117 disposals for a total of 69 hectares that will be used to develop around 1,885 housing units.

The main transactions in 2018 involved the sale of land and a space to SPLA Paris Batignolles Aménagement, the sale of a 11,261 m<sup>2</sup> plot of land on the Ilot Est of the Yèbles de Changis ZAC (joint development zone) in Avon, enabling the construction of 250 housing units and 3,300 social residences, and the sale of a 6,853 m<sup>2</sup> property as part of the Noisy-Petit-Noisy urban development project.

INDICATORS	2018	2017	2016
Surface areas transferred during the year (hectares)	124	240	1,474
of which surface areas transferred for the construction of housing (hectares)	18	218	23
Number of housing units built	1,885	3,492	2,132
of which number of social housing units built	695	1,362	1,099

#### - Streamlining of tertiary and logistics sites

The bundling of services involving the South-East Engineering Zone Department and the SNCF Réseau Provence-Alpes-Côte d'Azur (PACA) Regional Department in the TriAngle Saint-Charles building leased in Marseilles enabled the renovation of team work spaces through a 222 m<sup>2</sup> reduction of surface areas (-4%). The signing of a lease in Saint-Quentin-Fallavier to rehouse the Lyon Infralog inventories reduced developed surface areas by 29% and outdoor surface areas by 57%.

#### - Contribution to the growth of real estate transactions

An initial Strategic Committee meeting was held in December 2018 as a follow-up to the 2017 creation of a real estate holding company, whose main purpose is to invest in companies that develop and promote the properties and equipment sold by the public rail group,

In anticipation of the 2024 Olympics and the arrival of the CDG Express in the Paris Est station in 2024, a land agreement was signed with SNCF Mobilités to roll out the Gare du Nord 2024 project relating to the modernisation of Gare du Nord station. To provide Gares & Connexions with the land control necessary for the project, the agreement stipulates that SNCF Réseau will sell spaces located on top of the 108/110 buildings, spaces located in the bus station buildings, and several spaces overlooking the tracks. This project, initiated in 2017, will be completed in 2024 prior to the Olympic and Paralympic Games.

The Gobelins sites and part of the Invalides station have been selected as part of an innovative call for urban projects known as "Reinvent Paris 2". SNCF Réseau has expanded its role at the Invalides site as part of the property's development and extended its occupancy leases to 2021 pending the sale concerning the Gobelins site.

The "Reinvent the Greater Paris region" programme now has six sites: the Ardoines, Bercy-Charenton, Charenton, Orly-Rungis, Pleyel and Argenteuil. With respect to the Argenteuil site, the Local Urban Development Plan covering the modifications necessary for the project's development has been approved. SNCF Réseau's sale of a 7,660 m<sup>2</sup> lot and the purchase of premises to assemble the teams are covered by promises of sale.

#### - Network refurbishment support

The renovation of SNCF Réseau's training facilities is continuing, particularly in regard to the creation of two campuses in the Lyon and Bordeaux regions.

SNCF Réseau has authorised the construction of an annex to the Saint-Pierre-des-Corps Infra Equipment Maintenance Centre with a surface area of 2,600 m<sup>2</sup>. Covering the Droué site, this project will enable autonomous maintenance for LGV Atlantique locomotives and optimise productivity.

#### - Development of unused lines

SNCF Réseau owns kilometres 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.

INDICATORS	2018	2017	2016
Share of kilometres for lines closed that were subject to right-of-way protection (%)	85	80	76

### 4.6.3. Prevent and reduce railway noise

#### 4.6.3.1. 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 are contingent to the noises made by tracks and rolling stock. After several years of research and testing, the maintenance policy includes, for the first time this year, acoustic performance requirements so as to improve acoustic gains after rail reprofiling.

In terms of noise management in major agglomerations, SNCF Réseau is also working closely with the French Federation of Environmental Protection Associations to prepare an educational guide on railway noise and is a member of the French National Noise Committee, Bruitparif for Ile-de-France, and Acouité for Greater Lyon. The work with DB Netze will enable exchanges on best practices and innovation. Several research projects are examining new methods or technologies. 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 European think tanks and national and European standard-setting committees.

#### 4.6.3.2. 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. For example, the establishment of ballast pits reduces 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.

been published to date, although the company has referenced it internally.

INDICATORS	2018	2017	2016
Investments devoted to the resorption railway noise black spots during development and modernisation projects (€m)	2.7	2.7	5.9
Number of railway noise black spot buildings treated	718	734	736
Population benefiting from railway noise black spot treatment (nb of persons)	2,164	2,142	2,208

#### 4.7. NON-FINANCIAL PERFORMANCE METHODOLOGY

Pursuant to the regulatory requirements established by the transposition into French law of the European Directive on Non-Financial Reporting of 22 October 2014, the **non-financial performance statement of SNCF Réseau** is based on the reporting obligation set out in Article L. 225-102-1 and Articles 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.

The new measure clearly states an approach by “materiality” and the quest for greater relevance and utility during the year for companies and their stakeholders. This no longer consists of drawing up a precise list of non-financial information but a proactive and customised statement presenting:

- the company's business model at the beginning of the report;
- the main risks/opportunities for the 43 major non-financial issues from Article 225 in Section 4.1;
- policies and procedures rolled out as a response in Section 4;
- the results and key performance indicators in Section 4.

Information on anti-corruption is presented in Section 3, respect of human rights in Section 4.5 and anti-tax avoidance in Section 2.5.2.

With the exception of information on the fight against food waste, respect for animal well-being and a responsible and sustainable food supply, as such information is immaterial for SNCF Réseau.

Reporting governance, the process, the timetable and the methodological specificities of certain indicators are explained in a methodology note<sup>10</sup>available online. It is based on the preparation of a non-financial reporting protocol that has not

<sup>10</sup> The non-financial methodology reporting is available online: <https://www.sncf-reseau.com/fr/documentation/engagements-developpement-durable>

### 5. CHALLENGES AND OUTLOOK

In the context of the new railway pact and the ongoing Nouvel'R project, SNCF Réseau's planning is centred on its 2030 strategic vision; therefore, in 2019 several projects will be launched to prepare the new SNCF as it faces the opening of rail company competition.

Fiscal 2019 will be a pivotal and active year for SNCF Réseau as it prepares for the 1 January 2020 implementation of the main measures of the new railway pact, and specifically the change in legal form to a public limited company with public capital. This will provide greater flexibility while it remains a State company, and unified station management thanks to the transfer of Gares et Connexions via a subsidiary.

The new railway pact will also build a new and more competitive labour framework for the company, an arrangement that railway workers and future candidates will find more appealing and motivational. The opening to competition and digital transformation represent true challenges in terms of changing business lines. Likewise, performance and productivity requirements and the end of railway employee status in hiring pursuant to the law are all factors that will result in the negotiation of a new collective agreement and new company agreements for the rail sector based on the new railway pact.

The roll-out of the Nouvel'R corporate plan will continue in order to complete SNCF Réseau's transformation, prepare the network of tomorrow and better satisfy client expectations. Nouvel'R is a long-term project that will:

- stabilise processes and increase transversal thinking in our management methods within one year;
- significantly boost service quality and meet economic performance targets within three years;
- present the first results of the High-Performance Network within ten years.

The operational transformation project to obtain a "high performance" network comprises several modernisation modules to significantly reduce signalling system failures, optimise line capacity or gain greater productivity in relation to centralised traffic command. The impacts of these modules will be multiplied when they are rolled out simultaneously.

Network modernisation and improvement efforts will continue in the coming years. In line with the Eole project, the RER E's extension west of Paris will reduce passenger traffic for the RER A, B and D lines and will be commissioned in two phases: in 2022 for the Haussmann-Saint-Lazare – Nanterre-la-Folie section and in 2024 for the complete line to Mantes-la-Jolie.

The Paris-Nord station will be expanded significantly to accommodate the growth of all SNCF Mobilités transport activities. The number of daily passengers should in fact increase by over 40% by 2030. The work should triple passenger spaces, from 36,000 m<sup>2</sup> to 110,000 m<sup>2</sup>: a new departure terminal will ease traffic flow, the Channel terminal will be enlarged, traffic spaces will be multiplied by 2.5 and accessibility will be enhanced by increasing the number of lifts and escalators. This work will be completed for the 2024 Olympics.

Service quality is also one of the key drivers highlighted by SNCF Réseau as part of its 2030 strategy. Through the H:00 and FIRST approaches, priority will be given to passenger information and regularity by providing rail services that are more punctual and robust with corrections of network causes.

Safety is of course a major challenge for SNCF Réseau, particularly through the PRISME programme, which will apply a safety excellence approach based on six pillars: Employee "Proactivity", "Risk" analysis, management of entity "Interfaces", procedural "Simplification", creation of "Managerial" conditions conducive to personal employee involvement, and access to highly innovative "Equipment".

Fiscal 2019 will therefore be a year of new challenges, where the involvement of all will contribute to collective success.



# 03 – SNCF RÉSEAU GROUP CONSOLIDATED FINANCIAL STATEMENTS

IFRS – In € millions





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## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

### CONSOLIDATED ASSETS

In € millions	Note	31/12/2018	31/12/2017
Goodwill		-	-
Intangible assets	4.1.1	282	320
Property, plant and equipment	4.1.2	64,380	64,641
Financial assets	5.2.1	3,693	3,732
Investments in companies consolidated under the equity method		11	11
Deferred tax assets	8.3	2,827	3,511
<b>Non-current assets</b>		<b>71,193</b>	<b>72,216</b>
Inventories and work-in-progress	4.6.1	536	529
Operating receivables	4.6.2	2,432	2,388
Grants receivable	4.6.3	1,332	1,592
Financial assets	5.2.1	1,645	1,467
Cash and cash equivalents	5.2.2	2,797	3,326
<b>Current assets</b>		<b>8,741</b>	<b>9,301</b>
<b>Total assets</b>		<b>79,934</b>	<b>81,517</b>

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	31/12/2018	31/12/2017
Share capital	5.1	9,765	9,765
Reserves and accumulated deficit		-26,748	-21,717
<b>Total equity</b>		<b>-16,984</b>	<b>-11,953</b>
Employee benefits	6.2.1	851	865
Provisions	4.7	256	271
Investment grants	4.2.1	29,025	28,216
Financial liabilities	5.2.1	52,002	51,246
Right of use granted to the concession holder	4.3	2,598	2,647
<b>Non-current liabilities</b>		<b>84,732</b>	<b>83,245</b>
Employee benefits	6.2.1	61	58
Provisions	4.7	2	39
Operating liabilities	4.6.4	4,603	4,327
Grants	4.2.2	1,798	1,892
Financial liabilities	5.2.1	5,723	3,909
<b>Current liabilities</b>		<b>12,186</b>	<b>10,224</b>
<b>Total equity and liabilities</b>		<b>79,934</b>	<b>81,517</b>

## CONSOLIDATED INCOME STATEMENT

In € millions	Note	31/12/2018	31/12/2017
Revenue	7.1	6,301	6,496
Purchases and external charges	7.3	-2,127	-2,088
Employee benefit expense	7.4	-2,331	-2,315
Taxes and duties other than income tax	7.5	-231	-211
Other operating income and expenses		-60	16
<b>Gross profit</b>		<b>1,553</b>	<b>1,897</b>
Depreciation and amortisation	4.1.4	-2,107	-1,764
Net movement in provisions	4.7	86	113
Investment grants released to profit or loss	4.2.4	1,035	778
Net proceeds from asset disposals	4.4	60	74
<b>Current operating profit</b>		<b>627</b>	<b>1,099</b>
Impairment losses	4.5	-3,400	-
<b>Operating profit/(loss)</b>		<b>-2,773</b>	<b>1,099</b>
Share of net profit of companies consolidated under the equity method		0	1
<b>Operating profit/(loss) after share of net profit/(loss) of companies consolidated under the equity method</b>		<b>-2,773</b>	<b>1,100</b>
Net borrowing and other costs	5.4	-1,247	-1,163
Net finance costs of employee benefits	5.4	7	-9
<b>Finance cost</b>		<b>-1,241</b>	<b>-1,172</b>
<b>Net profit/(loss) before tax from ordinary activities</b>		<b>-4,013</b>	<b>-72</b>
Taxes	8.1	-771	-129
<b>Net profit/(loss) from ordinary activities</b>		<b>-4,784</b>	<b>-201</b>

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

In € millions	31/12/2018	31/12/2017
<b>Net profit/(loss) for the year</b>	<b>-4,784</b>	<b>-201</b>
<b>Other comprehensive income:</b>		
Change in fair value of cash flow hedges	-222	353
Tax on change in fair value of cash flow hedges	57	-141
Change in fair value of hedging costs	46	-
Tax on change in fair value of hedging costs	-12	-
Share of recyclable other comprehensive income of companies consolidated under the equity method	-	-
<b>Total recyclable other comprehensive income</b>	<b>-130</b>	<b>213</b>
Actuarial gains and losses arising from employee defined benefit plans	10	-22
Tax on actuarial gains and losses arising from defined benefit plans	-3	8
Share of non-recyclable other comprehensive income of companies consolidated under the equity method	-	-
<b>Total non-recyclable other comprehensive income</b>	<b>6</b>	<b>-15</b>
<b>Total comprehensive income/(loss) for the year</b>	<b>-4,909</b>	<b>-3</b>

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

In € millions	Share capital	Recyclable reserves			Accumulated reserves	Net profit/(loss) for the year	Total equity
		Non-recyclable reserves	Cash flow hedge	Hedging costs (R/D and FCBS)			
<b>Equity as at 01/01/2017</b>	9,765	-13	-948	-	-20,643	-120	-11,959
Net loss for the year	-	-	-	-	-	-201	-201
Other comprehensive income	-	-15	213	-	-	-	198
<b>Total comprehensive income</b>	-	<b>-15</b>	<b>213</b>	-	-	<b>-201</b>	<b>-3</b>
Appropriation of earnings	-	-	-	-	-120	120	0
Other changes	-	-	-	-	8	-	8
<b>Equity as at 31/12/2017</b>	9,765	-28	-736	-	-20,753	-201	-11,953
Net loss for the year	-	-	-	-	-	-4,784	-4,784
Other comprehensive income	-	6	-165	34	-	-	-124
<b>Total comprehensive income</b>	-	<b>6</b>	<b>-165</b>	<b>34</b>	-	<b>-4,784</b>	<b>-4,908</b>
Appropriation of earnings	-	-	-	-	-201	201	-
Other changes	-	0	32	-156	1	-	-123
<b>Equity as at 31/12/2018</b>	9,765	-21	-868	-122	-20,953	-4,784	-16,984

## CONSOLIDATED CASH FLOW STATEMENT

In € millions	Note	31/12/2018	31/12/2017
Net profit/(loss) for the year attributable to equity holders of the parent		-4,784	-201
<b>Net profit/(loss) for the year</b>		<b>-4,784</b>	<b>-201</b>
Eliminations:			
share of profit of associates		-0	-1
deferred tax expense(income)		767	130
depreciation, amortisation, and provisions(*)		4,387	881
revaluation gains/losses (fair value)		63	24
net proceeds from disposals and gains and losses on dilution	4.4	-60	-74
<b>Cash from operations after net borrowing costs and taxes</b>		<b>373</b>	<b>759</b>
Eliminations:			
net borrowing costs	5.5	1,183	1,136
<b>Cash from operations before net borrowing costs and taxes</b>		<b>1,559</b>	<b>1,894</b>
Impact of change in working capital requirement	4.6	58	-80
Taxes paid (collected)		-5	1
<b>Cash flow from operating activities</b>		<b>1,612</b>	<b>1,815</b>
Acquisitions of subsidiaries net of cash acquired		0	-1
Purchases of intangible assets and property, plant and equipment	4.1.3	-4,851	-4,902
Capitalised borrowing costs	4.1.3	-222	-278
Disposals of intangible assets and property, plant and equipment		97	94
Changes in loans and advances	5.5	-230	-249
Investment grants received	4.2.3	2,046	2,350
<b>Cash flow used in investing activities</b>		<b>-3,162</b>	<b>-2,985</b>
Issue of debt instruments	5.5	2,277	4,878
Borrowing repayments	5.5	-1,179	-1,386
Payments relating to PPP payables	5.5	-275	-63
Receipts relating to PPP receivables	5.5	271	63
Net borrowing costs paid	5.5	-1,265	-1,165
Change in cash liabilities	5.5	1,193	-1,026
<b>Cash flow from/(used in) financing activities</b>		<b>1,024</b>	<b>1,301</b>
<b>Increase (decrease) in cash and cash equivalents</b>		<b>-526</b>	<b>131</b>
Opening cash and cash equivalents		3,303	3,172
Closing cash and cash equivalents	5.2.2	2,777	3,303

(\*) 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 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 2018 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.

The basis of preparation for the 2018 consolidated financial statements detailed in the following notes is the result of:

- standards and interpretations of mandatory adoption for fiscal years beginning before or after 1 January 2018;
- elected accounting options and exemptions applied in the preparation of the 2018 financial statements. These options and exemptions are described in the relevant notes to the financial statements. 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.

#### Implementation of new IFRS

2018 was the first year of adoption for IFRS 9 and IFRS 15:

#### IFRS 9 Financial instruments

SNCF Réseau has adopted IFRS 9 on financial instruments since 1 January 2018. This standard has three modules:

- Module 1: Classification and measurement of financial assets and liabilities;
- Module 2: Impairment based on expected credit losses;
- Module 3: Hedge accounting.

#### Impacts on the SNCF Réseau scope

Classification and measurement of financial assets and liabilities: the main impacts for SNCF Réseau consist of a change in accounting classification, with no material impact on measurement, for:

- Undertakings for Collective Investments in Transferable Securities (UCITS) and other money market mutual funds: they switch from being assets measured at fair value on

option to non-Solely Payment of Principal and Interest (SPPI) assets measured at fair value through P&L;

- Negotiable Debt Securities: these assets, which satisfy the SPPI criteria, switch from being assets recognised at fair value through P&L on option under IAS 39 to assets measured at amortised cost.

#### Impairment based on expected credit losses:

- Pursuant to section B5.5.35 of IFRS 9, SNCF Réseau has elected to impair trade receivables for the amount of expected credit losses over the total life of the receivable. This impairment is calculated using a flat rate by customer segment presenting a consistent risk. The segments used are receivables relating to the infrastructure manager activity and the property management activity. The rate applicable to each segment is the ratio between irrecoverable receivables and the revenue of the last two prior years for each of the two segments. In the event of proven risk, the receivable is impaired according to the actual risk of an outflow of resources.
- As at 31 December 2018, the IFRS 9 provision was immaterial.

#### Hedge accounting:

- Easing of hedging relationship effectiveness criteria, particularly the removal of the retrospective test involving compliance with the 80%-125% interval. However, the calculation and recognition of ineffectiveness are maintained, with marginal impacts on the calculation of ineffectiveness amounts, strictly speaking.
- Clauses relating to hedging costs: option adopted to exclude the "Foreign Currency Basis Spread" component of Cross Currency Swaps and the "Premium/Discount" component of forward purchases from the hedging relationship. The changes in value of these items are recognised in OCI to reduce ineffectiveness in P&L.
- Extension of the eligibility of hedged items in a hedging relationship: a derivative may now cover an aggregate exposure comprising a non-derivative and a derivative.

#### Transition methods used

Modules 1 and 2 are applied retrospectively with no presentation of comparative data in accordance with the option offered by the standard.

Module 3 is applied prospectively with no comparative restatements pursuant to the standard's general principle. By exception, and in accordance with the possibility offered by the standard, SNCF Réseau elected to apply retrospectively the new clauses relating to the recognition of the basis spread of cross currency swaps.



## Presentation of the impacts arising from the retrospective application of the basis spread recognition as at 31 December 2017

In € millions	Share capital	Non-recyclable reserves	Recyclable reserves	Accumulated reserves	Net profit/(loss) for the year	Total equity
			Cash flow hedge	Hedging costs (FCBS)		
Equity after P&L appropriation published as at 31/12/2016	9,765	-13	-948	-	-20,763	-11,959
<b>Restatement of opening equity as at 01/01/2017</b>	-	-	<b>172</b>	<b>-175</b>	<b>3</b>	-
<i>of which</i>						
Reclassification of FVH accumulated reserves to BS OCI				-	-	
Reclassification of CFH accumulated reserves to BS OCI				-9	9	
Reclassification of CFH reserves to BS OCI			260	-260		
Reclassification of CFH accumulated reserves to CFH OCI reserves			2		-2	
Deferred taxes relating to reclassifications			-90	92	-2	
<b>Equity after P&amp;L appropriation restated for the opening balance as at 01/01/2017</b>	<b>9,765</b>	<b>-13</b>	<b>-776</b>	<b>-175</b>	<b>-20,760</b>	<b>-11,959</b>
2017 published cash flows		-15	213	-	10	-201
<b>Restatement of 2017 cash flows</b>			<b>-20</b>	<b>19</b>		-
<i>of which</i>						
Reclassification of FVH P&L to BS OCI				-9		9
Reclassification of CFH P&L to BS OCI				9		-9
Reclassification of CFH reserves to BS OCI			-56	56		
Reclassification of CFH P&L to CFH OCI			-1			1
Deferred taxes relating to reclassifications			37	-37		-1
<b>2017 restated cash flows</b>			<b>193</b>	<b>19</b>		<b>-201</b>
<b>Pro forma restated equity as at 31/12/2017</b>	<b>9,765</b>	<b>-28</b>	<b>-583</b>	<b>-156</b>	<b>-20,750</b>	<b>-201</b>

The 2018 cash flows, compared to 2017, are presented in the following table:

In € millions	Share capital	Non-recyclable reserves	Recyclable reserves	Accumulated reserves	Net profit/(loss) for the year	Total equity
			Cash flow hedge	Hedging costs (FCBS)		
<b>Equity after P&amp;L appropriation restated for the opening balance as at 01/01/2017</b>	<b>9,765</b>	<b>-13</b>	<b>-776</b>	<b>-175</b>	<b>-20,760</b>	<b>0</b>
Restated 2017 cash flows net of deferred taxes	-	-15	193	19	10	-201
<b>Pro forma restated equity as at 31/12/2017</b>	<b>9,765</b>	<b>-28</b>	<b>-583</b>	<b>-156</b>	<b>-20,750</b>	<b>-201</b>
Appropriation of 2017 P&L					-201	201
2018 published cash flows net of deferred taxes		6	-284	33	-3	-4,784
<b>Equity as at 31/12/2018</b>	<b>9,765</b>	<b>-21</b>	<b>-868</b>	<b>-122</b>	<b>-20,953</b>	<b>-4,784</b>

**IFRS 15 - Revenue from contracts with customers**

Since 1 January 2018, SNCF Réseau has applied IFRS 15 on the recognition of revenue from contracts with customers.

**Definition of performance obligations and their considerations**

IFRS 15 replaces IAS 18 "Revenue," which set out the transfer of risks and rewards as the principle for recognising revenue. IFRS 15 is based on the more restrictive notion of the transfer of control.

SNCF Réseau revenue mainly comprises collected infrastructure fees. Under the regulation governing the use of the railway infrastructure described in the *Document de Référence du Réseau*, the fees have different classifications

## 03 - Consolidated financial statements

according to the activities and the nature of the costs they offset. These legal classifications have nothing in common with the recognition rules set out in IFRS 15.

The adoption of IFRS 15 does not amend the revenue recognition method used by SNCF Réseau that continues to recognise infrastructure fee income according to train traffic, which alone marks the unconditional transfer of the service to the customer.

However, the analysis of all customer contracts led SNCF Réseau to review the recognition of incentive and compensation schemes relating to the network manager activity previously recorded in external charges. These schemes represent an adjustment of the consideration of the services offered and should be recognised as a revenue adjustment in accordance with IFRS 15.

As at 31 December 2018, the amount reclassified as a revenue reduction was €13 million.

### Transition methods used:

SNCF Réseau opted for the practical expedient set out in IFRS 15, which requires that the reclassification will not impact the fiscal year presented for comparative purposes.

### Notes to the consolidated financial statements

The current financial statements present:

- a note on P&L segmentation (see 7.1),
- a note on the SNCF Réseau P&L recognition method that outlines the Performance Obligations adopted and their performance criteria (see 7.1),
- a table of changes in contractual assets and liabilities (see 7.2).

## Standards and interpretations that will be adopted for first time after fiscal 2018

Standard or interpretation	Summarised description	Expected impacts	Mandatory date of adoption (period beginning as of)	European Union approval status
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.	<p>SNCF Réseau opted for the simplified retrospective transition method instead of the retrospective method under IAS 8 due to the minor variance between simulations and the substantial costs of implementing the retrospective method. The simplified method limits the restatement to asset leases as at 01/01/2019 based on the incremental rate on this date with no opening balance adjustment. A specific information system is being rolled out to satisfy the requirements set out in the standard.</p> <p>For contracts in progress on the transition date, the rate used to value the rights of use is based on the residual term of the contract.</p> <p>In the event of negative rates, a zero discount rate will be adopted.</p> <p>The application of this standard will increase total assets (right of use and liabilities) by around €500 million and reduce P&amp;L slightly by €1 million.</p>	01/01/2019 early adoption as at 31/12/2018 not opted by the SNCF Group	09/11/2017
IFRIC 22	This interpretation of IAS 21 "Effects of Changes in Foreign Exchange Rates" specifies the methods used to recognise foreign currency advances.	Not applicable to SNCF Réseau which does not conduct foreign currency transactions.	01/01/2018	28/03/2018
IFRIC 23	This interpretation of IAS 12 specifies the accounting treatment of tax risks and prohibits the measurement of a probable outflow of resources while including the probability of detection by the tax authorities.	SNCF Réseau did not identify any tax treatments likely to be challenged by the tax authorities.	01/01/2019 early adoption as at 31/12/2018 not opted by the SNCF Group	24/10/2018

## 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 2018 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 2018 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:

## 03 - Consolidated financial statements

- 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.

- 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 8.3)

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 6)

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.

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

Entity name	% interest	% control	Revenue	Profit or loss	Total assets	Consolidation method
SNCF Réseau	100	100	6,198	-4,784	79,860	Parent company
SFERIS	100	100	92	0	52	Full consolidation
Altaméris	100	100	4	0	3	Full consolidation
CDG Express Etudes	33	33	0	0	15	Method applicable to joint operations
Eurailscout BV	50	50	8	0	4	Equity accounting

The interest in LFP (Linea Figueras-Perpignan) 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 its equity.

Following the creation of the wholly-owned real estate holding company "Immo Réseau" (SAS) in April 2018 purchased from SNCF Participations for its equity value. Two joint development and promotion subsidiaries (SAS) were created in the second half of 2018, with no significant business as at 31 December 2018:

- EFAC (Espaces Ferroviaires Aménagement Commun)
- EFPC (Espaces Ferroviaires Promotion Commun).

In December 2018, CDG Express Etudes was dissolved upon expiry of its term stipulated in its bylaws. During the liquidation phase, its research assets will be sold to CDG Express created on 5 October 2018 and whose activity will begin upon

- Provisions for environmental risks (see Note 4.7)

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 consolidated 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 intra-group transactions.

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

signature of the various agreements on 11 February 2019 (see Note 3).

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.

Consequently, SNCF Réseau has only defined a single sector.

## 2 MAJOR EVENTS

### 2.1 RAIL REFORM

The law for a new railway pact was finally adopted and published in the *Journal Officiel* on 28 June 2018 and various reform measures were announced by the French government. The first order was published in December 2018, and will be supplemented with additional orders that have still to be finalised.

The new railway pact provides for the following:

- a new golden rule will cover a wider scope,
- Gares & Connexions will be entrusted with the unified management of passenger stations via an SNCF Réseau subsidiary,
- absorption by the French State of €35 billion of SNCF Réseau's debt: pursuant to the announcements of the French Prime Minister on 25 May 2018, the railway system reform will result in the absorption by the French State of €35 billion of SNCF Réseau's debt, of which €25 billion in 2020 and an additional €10 billion in 2022, in order to substantially improve the company's financial structure.

In a press release dated 26 November 2018 and via Agence France Trésor, the French Minister of the Economy and Finance indicated that "this debt absorption would consist in setting up a mechanism of identical mirror loans between SNCF Réseau and the Caisse de la Dette Publique (CDP), following

which the French State would replace SNCF Réseau as CDP's debtor, upon the French Parliament's authorisation under a finance law, thus relieving the company of the corresponding debt".

The equal treatment of the company's bondholders will be fully preserved under the terms and conditions governing the French State's absorption of the SNCF Réseau debt.

- Limitation of changes in infrastructure fee pricing with regard to inflation for non-regulated activities.

### 2.2 IMPAIRMENT TEST

For the 30/06/2018 accounts closing, the authorisation law for a new railway pact adopted on 14 June 2018 and the various announcements by the French government, particularly regarding the change in fee indexations or the assumption of the debt were indications of impairment. A new test was therefore carried out on 30/06/2018.

The detailed components of this test are shown in Note 4.5 "Impairment tests of non-current assets." The outcome of this test gave rise to another asset impairment loss of €3.4 billion as at 30/06/2018, in addition to the €9.6 billion impairment loss recognised as at 31/12/2015.

As part of the 31/12/2018 closing, SNCF Réseau did not identify any new indications of impairment and did not conduct any new impairment tests.

## 3 SUBSEQUENT EVENTS

### ARAFER opinion

ARAFER's opinion on fee pricing for the 2020 service timetable for regulated activities was not considered as an indication of impairment (see Note 4.5).

### CDG Express

The decree approving the concession agreement for the CDG Express, a high-speed train linking Paris to Roissy airport in twenty minutes as from 2024 was published in the *Journal Officiel* on 16 February 2019.

On 11 February 2019, the French Transport Ministry announced the signing of the agreement with the infrastructure manager, a company equally held by ADP, SNCF Réseau and the Caisse des Dépôts.

## 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 2018 break down as follows:

In € millions	31/12/2018			31/12/2017		
	Gross	Amortisation and impairment	Net	Gross	Amortisation and impairment	Net
Concessions, patents, software	515	-445	70	437	-345	92
Other intangible assets	137	-125	13	214	-128	86
Intangible assets in the course of development	199	0	199	142	0	142
<b>TOTAL</b>	<b>851</b>	<b>-569</b>	<b>282</b>	<b>793</b>	<b>-473</b>	<b>320</b>

Movements in intangible assets break down as follows:

In € millions	Intangible assets in the course of development			Total
	Concessions, patents, software	Other intangible assets		
<b>Net carrying amount as at 01/01/2017</b>	<b>84</b>	<b>57</b>	<b>103</b>	<b>245</b>
Acquisitions	-0	45	101	145
Disposals	-0	-	-	-0
Amortisation and provisions	-39	-34	-	-73
Commissioning and other changes	47	18	-62	3
<b>Net carrying amount as at 31/12/2017</b>	<b>92</b>	<b>86</b>	<b>142</b>	<b>320</b>
Acquisitions	0	1	101	103
Amortisation and provisions	-61	-15	-	-76
Impairment losses	-13	-9	-	-22
Commissioning and other changes	53	-51	-44	-42
<b>Net carrying amount as at 31/12/2018</b>	<b>71</b>	<b>13</b>	<b>199</b>	<b>282</b>

Acquisitions in 2018 primarily included internally generated software commissioned or in the course of development.

Intangible assets totalling €44 million were commissioned in 2018, compared with €145 million in 2017.

#### 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 non-completion 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 2018 break down as follows:

In € millions	31/12/2018			31/12/2017		
	Gross	Depreciation and impairment	Net	Gross	Depreciation and impairment	Net
Investment property	322	-24	298	332	-24	309
Land and buildings	11,677	-4,303	7,374	11,259	-3,355	7,904
Tracks, earthworks, engineering works and level crossings	53,216	-22,031	31,185	48,388	-18,840	29,548
Industrial and technical plant (ITP) and other assets	7,808	-1,111	6,697	7,791	-946	6,845
Electrification, telecommunications, signalling	16,248	-9,182	7,066	15,624	-8,144	7,480
Transportation equipment	981	-859	122	1,005	-840	165
Property, plant and equipment in the course of construction	11,671	-33	11,637	12,428	-37	12,391
<b>TOTAL</b>	<b>101,924</b>	<b>-37,544</b>	<b>64,380</b>	<b>96,828</b>	<b>-32,187</b>	<b>64,641</b>

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

In € millions	Investment property	Land and buildings	Tracks, earthworks, engineering works and level crossings	Industrial and technical plant (ITP) and other assets	Electrification, telecommunications, signalling and other assets	Transportation equipment	Property, plant and equipment in the course of construction	Total
<b>Net carrying amount as at 01/01/2017</b>	<b>333</b>	<b>6,210</b>	<b>24,712</b>	<b>228</b>	<b>5,877</b>	<b>171</b>	<b>23,651</b>	<b>61,182</b>
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	-	-	-	-	-	-	-	-
Commissioning and other changes	-4	1,862	5,747	6,735	2,103	8	-16,518	-67
<b>Net carrying amount as at 31/12/2017</b>	<b>309</b>	<b>7,904</b>	<b>29,548</b>	<b>6,845</b>	<b>7,480</b>	<b>164</b>	<b>12,390</b>	<b>64,640</b>
Acquisitions	-	-	-	2	-	-	5,080	5,082
Disposals	-10	-3	-	-0	-0	-	-	-13
Depreciation and provisions	-1	-169	-1,094	-185	-566	-14	4	-2,026
Impairment losses	-	-751	-2,096	-28	-472	-30	-	-3,378
Commissioning and other changes	-	395	4,828	64	624	1	-5,836	75
<b>Net carrying amount as at 31/12/2018</b>	<b>298</b>	<b>7,374</b>	<b>31,185</b>	<b>6,697</b>	<b>7,066</b>	<b>121</b>	<b>11,637</b>	<b>64,380</b>

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

Commissioned items of property, plant and equipment totalled €5,913 million:

- €5,538 million for railway projects;
- €174 million in capitalised interest;
- €83 million for Public-Private Partnerships (PPP): €59 million for the Nîmes Montpellier bypass (CNM) and €19 million for Global System Mobile communication for Rail (GSM-R) and €4 million for Sud Europe Atlantique (SEA);
- €118 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	31/12/2018	31/12/2017
Property, plant and equipment	-4,801	-5,059
Intangible assets	-103	-145
Capitalised borrowing costs	-222	-278
<b>Total acquisitions</b>	<b>-5,125</b>	<b>-5,482</b>
Changes in amounts payable on intangible assets and PP&E	52	302
<b>Intangible assets and PP&amp;E capital expenditure flows</b>	<b>-5,073</b>	<b>-5,180</b>

Investments in intangible assets in 2018 included IT project capitalised production for €103 million.

Investments in property, plant and equipment in 2018 totalled €4,801 million, including capitalised production for €4,447 million.

Investments in property, plant and equipment mainly include:

- €4,590 million in infrastructure investments which break down as follows:
  - o €4,316 million in direct production;
  - o €131 million in major repairs;
  - o €258 million in direct acquisitions;
  - o -€59 million in payments on account;
  - o -€56 million in cancelled projects.
- €211 million in other investments (rail equipment, machinery and other operating projects).

Claims were received by the SNCF Réseau in 2015 and 2018 for the BPL and SEA PPPs for €559 million.

These claims were mostly challenged by SNCF Réseau and only the accepted portion was recognised.

A framework agreement was signed between SNCF Réseau and OC'Via which definitively concluded the litigation relating to the CNM PPP. As at 31 December 2018, the BPL and SEA litigations were still ongoing.



#### 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:

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	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

Depreciation and amortisation break down as follows:

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

In € millions	31/12/2018	31/12/2017	Change
Amortisation of intangible assets	-77	-49	-28
Depreciation of property, plant and equipment	-2,029	-1,715	-314
<b>Depreciation and amortisation</b>	<b>-2,107</b>	<b>-1,764</b>	<b>-343</b>

The increase in net depreciation and amortisation was mainly attributable to the commissioning of PPPs and concessions as at 1 July 2017 (SEA for €91 million, BPL for €47 million and CNM for €48 million) and commissionings in 2018 (€175 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 non-depreciable 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, grants claims are reconciled with the amount of expenditure recognised. 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.

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### 4.2.1 Summary of non-current grants

In € millions	31/12/2018	31/12/2017
Development grants for assets in the course of construction	4,193	3,722
Development grants for commissioned assets*	21,220	21,035
Renewal grants for commissioned assets*	3,338	3,289
2017 renewal grant*	-	170
2018 renewal grant*	274	-
<b>Total</b>	<b>29,025</b>	<b>28,216</b>

(\*) Net of reversals

#### Development grants for assets in the course of construction

Grants as at 31 December 2018 totalled €4,193 million.

Movements in the period break down as follows:

In € millions	Gross amount as at 31/12/2017	Increase	Commissioning	Reclassification	Gross amount as at 31/12/2018
Grants for assets in the course of construction	3,722	1,757	-1,265	-21	4,193

#### 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 and other assets	Total
<b>Net carrying amount as at 31/12/2017</b>	<b>8</b>	<b>2,749</b>	<b>11,451</b>	<b>6,826</b>	<b>21,035</b>
Grants allocated to commissioned assets during the year	-8	70	1,035	168	1,265
Changes in Group structure	-	-	-	-	-
Disposal/Scrapping	-	-	-243	-	-243
Share of grant released to profit or loss	-7	-182	-313	-362	-864
Other	58	-373	3,065	-2,723	27
<b>Net carrying amount as at 31/12/2018</b>	<b>51</b>	<b>2,264</b>	<b>14,995</b>	<b>3,909</b>	<b>21,220</b>

**Renewal grants**

All the renewal grants received from the French State involve commissioned investments. 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	Accumulated	Net amount as at 31/12/2018
2004	01/07/2004	38	675	-257	418
2005	25/03/2005	42	574	-187	387
2006	09/05/2006	42	878	-264	614
2007	21/03/2007	35	734	-246	488
2008	17/04/2008	33	69	-31	38
2009	17/01/2009	42	844	-237	607
2010	22/01/2010	38	436	-147	289
2011	01/01/2011	51	20	-15	5
2012	01/01/2012	28	255	-102	153
2013	01/01/2013	41	75	-20	55
2016	01/01/2017	38	126	-7	119
2017	01/01/2018	38	170	-4	166
<b>Total</b>			<b>4,856</b>	<b>-1,518</b>	<b>3,338</b>

**4.2.2 Summary of current grants**

Grants presented in current liabilities correspond to grants claimed in advance.

<b>In € millions</b>	<b>31/12/2018</b>	<b>31/12/2017</b>
Operating grants claimed in advance	121	151
Investment grants claimed in advance	1,677	1,741
<b>Total</b>	<b>1,798</b>	<b>1,892</b>

**4.2.3 Investment grants received**

Investment grants had the following impacts on cash flows:

<b>In € millions</b>	<b>31/12/2018</b>	<b>31/12/2017</b>
Grant claims	2,034	2,219
Change in receivables on grants	12	131
<b>Investment grants received</b>	<b>2,046</b>	<b>2,350</b>

**4.2.4 Investment grants released to profit or loss**

<b>In € millions</b>	<b>31/12/2018</b>	<b>31/12/2017</b>	<b>Change</b>
Development investment grants released to profit or loss	914	736	178
Grants for renewals and upgrade and compliance work released to profit or loss	121	42	79
<b>Investment grants released to profit or loss</b>	<b>1,035</b>	<b>779</b>	<b>256</b>

Investment grants released to profit or loss correspond to development grants for commissioned assets in the amount of €914 million and renewal grants for commissioned assets in the amount of €121 million.

The increase in investment grants released to profit or loss was mainly attributable to the commissioning of PPPs and concessions (SEA for €69 million, BPL for €36 million and CNM for €50 million).

**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 €2,598 million as at 31 December 2018 compared with €2,647 million as at 31 December 2017. It represents the share of the investment financed by the concession holder. It is amortised over the term of the concession, i.e. 54 years, for €74 million in 2018.

**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 2018, net proceeds from asset disposals totalled €60 million (compared to €74 million as at 31 December 2017).

## 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.

### MEASUREMENT 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,
- 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<sup>2</sup>, 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 €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 and was used to confirm the network's economic value.

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 represented an indication of impairment for Infrastructure CGU assets. The new test carried out did not give rise to the recognition of an impairment change.

As at 30/06/2018, the adoption on 14 June 2018 of the authorisation law for a new railway pact and the various announcements by the French government, particularly regarding the change in SNCF Réseau infrastructure fee terms and conditions represented new indications of impairment. A new test was therefore carried out using available information taken from:

- the reference framework for the PRG economic and financial trajectory and its roll-out for SNCF Réseau that was presented for information purposes to the Board of Directors on 25 July 2018,
- exchanges with the French State that led to the definition of the trajectory's structural components as mentioned below.

This test gave rise to the recognition of additional impairment of €3.4 billion, the network's recoverable amount totalling €30.1 billion, of which 93% represented by the terminal value, for a reference net carrying amount of €33.5 billion as at 30/06/2018. It should be noted that the 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.

As part of the 31/12/2018 closing, SNCF Réseau did not identify any new indications of impairment for its infrastructure assets and did not therefore conduct any impairment tests.

It should be noted that ARAFER's opinion of 7 February 2019 on the fee pricing for the 2020 service timetable for SNCF Réseau regulated activities was not considered as an indication of impairment insofar as it should not apply to the years after 2020.

The French State notified SNCF Réseau of a draft order, pursuant to Article 33 of the Law of 27 June 2018 for a new railway pact, that will introduce, within Article 2133-5 of the French Transport Code, the fact that the infrastructure fees of regulated activities will be deemed as sustainable once there is a public service agreement guaranteeing the economic balance for the railway companies in the relevant market segments, while ensuring that the overall fee amount payable by a regulated transport activity does not exceed the share of the full cost of managing the network attributable to such activity. This draft order is currently being consulted at ARAFER and the Conseil d'Etat. It will be published by no later than 31 March 2019, the date on which the authorisation granted to the French Government by the French Parliament to adopt measures regarding this matter by enacting orders expires.

It should be noted that the net carrying amount of Infrastructure CGU assets was €31.0 billion as at 31 December 2018, compared with €32.8 billion as at 31 December 2017, after impairment recognised in previous years. These assets cover service lines and ongoing renewal work.

Other assets under construction (€1.8 billion as at 31 December 2018, compared to €0.9 billion as at 31 December 2017) involve capacity investments under development, whose value is analysed separately as part of a specific review.

The methodological items used to determine the recoverable amount as at 30/06/2018 as well as the various key assumptions are shown below:

The methodology adopted was identical to that applied during the previous impairment test.

It should be noted that the discounted forecast cash flows are calculated over the ten-year business trajectory from the 2017-2026 performance contract with the French State updated for new available information and extended until 2030, which continues to represent a normative year, as the network will therefore be considered as stabilised at that date with a sufficient level of performance or renewal to optimise the amount of maintenance. 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% with no change compared to the rate used for the test carried out on 31 December 2017.

The key test assumptions involved the levels of infrastructure fees, investments, productivity as well as government loans.

These assumptions were updated to take into account the agreements signed between the company and the French State resulting from the new economic and financial trajectory regarding:

- Changes in infrastructure indexation: limitation on the increase in TGV and freight infrastructure fees at the IPC index (1.75%) replacing the indexation set out in the previous performance contract and at the same time maintenance of the indexed pricing for regulated infrastructure fees, i.e. TER and TET access fees, pursuant to the initial performance contract and applicable regulations,
- With regard to freight pricing, maintenance by the French State of the offsetting mechanism, whose amount was raised to take into account the changes in indexation and the transition to the directly attributable cost model in connection with the 2019 pricing,
- Additional investments scheduled as from 2020 for around €200 million per year (at constant 2016 euros). These investments will confirm the quality of the renewed network in 2030,
- A gradual increase in financing for safety and accessibility expenses (outside the Greater Paris region) to achieve full financing as from 2024,
- Additional future productivity work for current €300 million until 2026 as well as the current €1.2 billion for productivity already recorded in the performance contract,
- The payment of investment grants by the French State on behalf of SNCF Réseau allocated to the financing of renewal investments for amounts revised upwards compared to the performance contract to achieve annual amounts of €988 million. These grants resulted from the French State's allocation of all or part of the dividends collected by SNCF from SNCF Mobilités' P&L, in addition to the transfer of a share of the Public Rail Group's tax consolidation income. The renewal investment grant amounts taken into account are based on the PRG's economic and financial trajectory as part of the Group's current tax and legal organisation that was also presented to

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the Supervisory Board on 27 July for information purposes.

The 10-year traffic forecasts for SNCF Mobilités were drawn up in connection with the Public Rail Group and are consistent with those of SNCF Mobilités.

The results of the sensitivity analyses carried out for the 30/06/2018 test were as follows:

Sensitivity to the valuation parameters:

A change of +/- 10 basis points in the discount rate represents a change of +/- €1.2 billion in the recoverable amount.

A change of +/- 10 basis points in the perpetual growth rate results in a change of +€0.8 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 +/- €2.0 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.

**4.6 OPERATIONAL WORKING CAPITAL REQUIREMENT**

In € millions	31/12/2018	31/12/2017
Inventories and work-in-progress	6	-41
Operating receivables	-143	-100
Operating liabilities	194	61
<b>Impact of the change in the WCR in the consolidated cash flow statement</b>	<b>58</b>	<b>-80</b>

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.

**4.6.1 Inventories and work-in-progress**

As at 31 December 2018, inventories and work-in-progress break down as follows:

In € millions	31/12/2018			31/12/2017	
	Gross	Impairment	Net	Net	Change
Raw materials	529	-100	429	429	0
Finished goods	85	-	85	73	13
Work-in-progress	21	-	21	27	-6
<b>Inventories and work-in-progress</b>	<b>636</b>	<b>-100</b>	<b>536</b>	<b>529</b>	<b>7</b>

In € millions	31/12/2017	Charges	Reversals	Reclassification	31/12/2018
Raw materials and supplies - impairment	114	14	28	-	100
<b>Impairment of inventories</b>	<b>114</b>	<b>14</b>	<b>28</b>	<b>-</b>	<b>100</b>

**4.6.2 Operating receivables**

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 non-recovery, based on individual and/or statistical analyses.

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Operating receivables break down as follows:

In € millions	31/12/2018			31/12/2017	
	Gross	Impairment	Net	Net	Change
Trade receivables and related accounts	1,316	-43	1,273	1,289	-16
Amounts payable to the French State and local authorities	586	-	586	516	69
Other operating receivables	575	-2	573	582	-9
<i>Of which supplier credit notes receivable and advances</i>	95	-	95	95	-1
<b>Net operating receivables</b>	<b>2,476</b>	<b>-44</b>	<b>2,432</b>	<b>2,388</b>	<b>44</b>

Trade receivables and related accounts comprised infrastructure fee receivables for €1,029 million as at 31 December 2018.

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 2018 and 2017:

In € millions	31/12/2017	Charges	Reversals	31/12/2018
Trade receivables and related accounts - impairment	-57	-91	105	-43
Other operating receivables - impairment	-1	-	-	-1
<b>Total</b>	<b>-58</b>	<b>-91</b>	<b>105</b>	<b>-44</b>

In € millions	31/12/2016	Charges	Reversals	31/12/2017
Trade receivables and related accounts - impairment	-46	-55	44	-57
Other operating receivables - impairment	-2	-1	2	-1
<b>Total</b>	<b>-48</b>	<b>-56</b>	<b>46</b>	<b>-58</b>

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

In € millions	Not past due	Impaired	Past due but not impaired				Total
			< 3 months	4 to 6 months	7 to 12 months	> 12 months	
31/12/2018	982	46	252	20	27	-11	1,316
31/12/2017	1,005	56	217	20	11	35	1,345

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	31/12/2018	31/12/2017
Grants to be collected	609	1,037
Grants to be claimed	769	623
Provisions for impairment	-46	-68
<b>Total</b>	<b>1,332</b>	<b>1,592</b>

Grants receivable break down as follows:

Grants to be collected break down as follows (gross value):

In € millions	Not past due	Impaired	Past due but not impaired				Total
			< 3 months	4 to 6 months	7 to 12 months	> 12 months	
As at 31 December 2018	182	46	-13	-	27	367	609
As at 31 December 2017	176	68	72	148	44	529	1,037



As at 31 December 2018, grants due but not written down over 12 months mainly concern the Regional Authorities for €143

million and Agence de Financement des Infrastructures Transport de France (ATITF) for €204 million.

#### 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	31/12/2018	31/12/2017	Change
Trade payables and related accounts	2,416	2,198	218
<i>o/w amounts payable to suppliers of PP&amp;E</i>	317	281	36
Payments received on account for orders	278	257	21
<i>o/w advances received on sales of PP&amp;E</i>	2	1	1
Employee-related liabilities	608	621	-14
Amounts payable to the French State and local authorities	444	441	4
Other operating payables	22	41	-19
Deferred income	836	770	66
<b>Total operating payables</b>	<b>4,603</b>	<b>4,327</b>	<b>276</b>

## 4.7 PROVISIONS

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.

Movements in provisions during the year break down as follows:

In € millions	01/01/2018	Charges	Reversals (used)	Reversals (not used)	31/12/2018	of which current	of which non-current
Tax, employee and customs risks	57	20	-48	-0	29	-	29
Environmental risks	167	12	-8	-8	163	-	163
Litigation and contractual risks	82	76	-37	-57	64	1	63
Other	4	1	-0	-4	1	1	0
<b>Total provisions</b>	<b>310</b>	<b>110</b>	<b>-93</b>	<b>-69</b>	<b>257</b>	<b>2</b>	<b>256</b>

### 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.

The provision was reversed following the repayment made to SNCF Mobilités.

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.

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.

In September 2018, the French tax authorities replied to SNCF Réseau's challenge. It waived the access fee reassessment.

SNCF Réseau continued the tax proceedings with meetings and interviews with the tax authorities which resulted in the withdrawal of the file by way of agreement. The €3 million provision for undisputed items was therefore reclassified to accrued expenses and an additional accrued expense of €3.5 million was recognised as at 31 December 2018

Appeal to the Conseil d'État for the calculation of the old age T2 contribution rate for the special pension plan:

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 as at 1 May 2017. Since 2 May 2017, the company has paid T2

contributions at the new rate determined by the decree. Nevertheless, on 23 May 2017, the company filed an appeal with the Conseil d'État in accordance with the decree of 28 June 2007, which provides for a revaluation mechanism based on changes in certain ordinary contributions. Several additional observations and observations in reply have since been produced by the company and the French State. Following the appointment of a reporting judge, the Conseil d'État hearing took place on 9 July 2018 and an unfavourable decision was issued on 18 July 2018.

Following this ruling, SNCF Réseau recorded a €2 million provision in its financial statements for the year ended 31 December 2018 impacting the valuation of employee commitments for personnel with qualifying status.

#### 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.

- May/June 2016 flooding

The provisions for bad weather were partially reversed according to the accounting of repairs.

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.

At the time of its creation, SNCF Réseau had equity of €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 2018, capital injections totalled €9.8 billion.

### 5.2 NET INDEBTEDNESS

#### 5.2.1 Presentation of net borrowing costs

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 ("Negative fair value of liability derivatives"),
- o debt arising from public-private partnership contracts ("PPP liabilities").
- o guarantee deposits received relating to leases.

**Less:**

- o guarantee deposits paid relating to debt hedging transactions,
- o fair value of trading or debt hedging asset derivatives ("Positive fair value of derivatives"),
- o financial assets at amortised cost and 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 assets"),
- o cash and cash equivalents.
- o guarantee deposits paid relating to leases.

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,
- Debt arising from leases under IFRS 16,

Asset and liability financial instruments are classified as current or non-current based on the final maturity.

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 IFRS net debt carrying amount totalled €49.6 billion, compared to €46.6 billion as at 31 December 2017, i.e. an increase of €3.0 billion.

31/12/2018

	Accounting qualification								Fair value of the class			
	Current	Non current	Total	IFRS net debt	At fair value through equity	At amortised cost	At fair value through profit or loss	Qualified for hedging	Total	Level 1	Level 2	Level 3
<b>In € millions</b>												
Equity investments	-	0	0	-	-	0	-	-	0	-	0	-
Loans, receivables and investments	1,120	489	1,609	1,609	-	1,609	-	-	1,609	1,120	489	-
Asset derivatives	259	820	1,079	1,079	-	-	12	1,067	1,079	-	1,079	-
PPP receivables	266	2,384	2,650	2,650	-	2,650	-	-	2,650	-	2,650	-
<b>Financial assets</b>	<b>1,645</b>	<b>3,693</b>	<b>5,338</b>	<b>5,337</b>	-	<b>4,258</b>	<b>12</b>	<b>1,067</b>	<b>5,337</b>	<b>1,120</b>	<b>4,218</b>	-
Marketable securities	1,908	-	1,908	1,908	-	-	1,908	-	1,908	1,908	-	-
Cash at bank and in hand	889	-	889	889	-	-	889	-	889	889	-	-
<b>Cash and cash equivalents</b>	<b>2,797</b>	-	<b>2,797</b>	<b>2,797</b>	-	-	<b>2,797</b>	-	<b>2,797</b>	<b>2,797</b>	-	-
Bonds	2,367	46,222	48,589	48,589	-	48,589	-	-	55,136	-	55,136	-
Bank borrowings	2	424	426	426	-	426	-	-	424	-	424	-
SNCF borrowings	25	662	686	686	-	686	-	-	930	-	930	-
Other borrowings	2	32	34	34	-	34	-	-	34	-	34	-
<b>Borrowings, of which</b>	<b>2,395</b>	<b>47,340</b>	<b>49,735</b>	<b>49,735</b>	-	<b>49,735</b>	-	-	<b>56,524</b>	-	<b>56,524</b>	-
unhedged	865	36,346	37,211	37,211	-	37,211	-	-	44,000	-	44,000	-
recognised using cash flow hedge accounting	1,077	8,735	9,812	9,812	-	9,812	-	-	9,812	-	9,812	-
recognised using fair value hedge accounting	454	2,258	2,712	2,712	-	2,712	-	-	2,712	-	2,712	-
Liability derivatives	82	2,224	2,306	2,306	-	-	16	2,290	2,306	-	2,306	-
Overdrafts	20	-	20	20	-	20	-	-	20	20	-	-
Cash borrowings	2,946	-	2,946	2,946	-	2,946	-	-	2,946	2,946	-	-
PPP payables	279	2,438	2,717	2,717	-	2,717	-	-	2,717	-	2,717	-
<b>Financial liabilities</b>	<b>5,723</b>	<b>52,002</b>	<b>57,724</b>	<b>57,724</b>	-	<b>55,418</b>	<b>16</b>	<b>2,290</b>	<b>64,513</b>	<b>2,967</b>	<b>61,547</b>	-
<b>IFRS net debt</b>				<b>49,590</b>								

31/12/2017

	Accounting qualification								Fair value of the class			
	Current	Non current	Total	IFRS net debt	At fair value through equity	At amortised cost	At fair value through profit or loss	Qualified for hedging	Total	Level 1	Level 2	Level 3
<b>In € millions</b>												
Equity investments	-	0	0	-	-	0	-	-	0	-	0	-
Loans, receivables and investments	1,134	255	1,388	1,388	-	1,338	50	-	1,388	1,134	255	-
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	-
<b>Financial assets</b>	<b>1,467</b>	<b>3,732</b>	<b>5,199</b>	<b>5,199</b>	-	<b>4,057</b>	<b>65</b>	<b>1,077</b>	<b>5,199</b>	<b>1,134</b>	<b>4,066</b>	-
Marketable securities	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	-	-
<b>Cash and cash equivalents</b>	<b>3,326</b>	-	<b>3,326</b>	<b>3,326</b>	-	-	<b>3,326</b>	-	<b>3,326</b>	<b>3,326</b>	-	-
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	-
<b>Borrowings, of which</b>	<b>1,869</b>	<b>46,537</b>	<b>48,405</b>	<b>48,405</b>	-	<b>48,405</b>	-	-	<b>55,126</b>	-	<b>55,126</b>	-
unhedged	1,781	34,288	36,069	36,069	-	36,069	-	-	42,789	-	42,789	-
recognised using cash flow 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	-	-	2,810	-	2,810	-
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	-
<b>Financial liabilities</b>	<b>3,909</b>	<b>51,246</b>	<b>55,155</b>	<b>55,155</b>	-	<b>52,842</b>	<b>69</b>	<b>2,244</b>	<b>61,875</b>	<b>1,701</b>	<b>60,175</b>	-
<b>IFRS net debt</b>				<b>46,630</b>								

The fair value of derivatives is determined using measurement techniques such as option valuation models or the discounted cash flow method. 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.

## 5.2.2 Financial assets and liabilities

As of 01/01/2018, SNCF Réseau has applied IFRS 9 on the recognition of financial instruments, which has replaced IAS 39.

IFRS 9 redefines the classification and measurement of financial assets according to a model that solely comprises three accounting categories:

- Assets at amortised cost
- Assets measured at fair value through OCI
- Assets measured at fair value through profit or loss

The classification in each of these asset categories depends on the analysis of two criteria:

- The financial instrument's intrinsic characteristics, i.e. the characteristics of its contractual cash flows (SPPI – Solely Payments of Principal and Interests criteria)
- The management model applied

The provisions of IAS 39 on the classification of financial liabilities were not modified; the two liability categories were maintained:

- Financial liabilities measured at amortised cost
- Liabilities measured at fair value through profit or loss

### 5.2.2.1 Financial assets

Receivables arising from operating activities are presented in Note 4.5

#### 5.2.2.1.1 Assets at amortised cost

Under IFRS 9, a financial asset shall be measured at amortised cost if the following two conditions are satisfied:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows.

- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI criteria).

On initial recognition, these assets are measured at amortised cost using the effective interest rate method.

At SNCF Réseau, "Assets at amortised cost" mainly comprise receivables connected with shareholdings, current account advances to associates or unconsolidated entities, and lease guarantee deposits.

It also includes advances granted to EOLE project financiers, a category of financial assets corresponding to margin call payments on hedging contracts as well as negotiable debt securities that are held according to the collection without resale model that satisfies the SPPI criteria.

Considering their residual term at closing, the Group considers that the nominal value of negotiable debt securities is a reasonable estimate of their amortised cost.

PPP-related assets, corresponding to time-lags in contractual payments with financiers in respect of grants to be claimed for PPP projects, also fall into this category.

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) since 2017, the project completion date. As the GSM-R project was not 100% financed, the grant receivable is lower than the related borrowing.

Grants receivable comprise €1,155 million for BPL, €1,119 million for CNM and €375 million for GSM-R as at 31/12/2018.

#### 5.2.2.1.2 Assets at fair value through OCI

No asset was classified in this category as was the case last year.

#### 5.2.2.1.3 Assets measured at fair value through profit or loss

Under IFRS 9, assets that do not belong to the two aforementioned categories (assets measured at amortised cost or fair value through OCI) are measured at fair value through P&L. Assets are measured at fair value at the balance sheet date and fair value gains and losses are recorded in finance cost.

For SNCF Réseau, this category includes UCITS and other money market mutual funds as well as the positive fair values of derivative financial instruments (trading and hedging).

Due to their characteristics, money market mutual funds can be considered as an instrument payable at any time on the request of the investor. They do not satisfy the definition of an equity instrument and cannot be measured at fair value through OCI. Furthermore, they do not satisfy the SPPI criteria and cannot be measured at amortised cost. The fair value adopted is their net asset value. The fair value falls under Level 1 of the fair value hierarchy set forth in paragraph 7.2 of IFRS 13.

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Trading assets correspond to derivative instruments not qualified for hedging. The amounts of derivative instruments not qualified for hedging are presented in the table in Note 5.2.2.2.2.

Hedging derivative instruments and their risk management are presented in Note 5.3.

Considering their residual term and the fact they are easily converted into a known amount of cash and exposed to a negligible risk of change in value, investments in UCITS and other money market funds are presented under Cash and Cash Equivalents.

For 2018, Cash and Cash Equivalents amounted to:

In € millions	31/12/2018	31/12/2017	Change
Monetary mutual funds equivalent to cash and negotiable debt securities maturing in less than three months (*)	1,908	2,231	-322
Cash at bank and in hand	889	1,095	-206
<b>Cash and cash equivalents in the statement of financial position</b>	<b>2,797</b>	<b>3,326</b>	<b>-528</b>
Current bank facilities	20	23	-3
<b>Cash and cash equivalents in the cash flow statement</b>	<b>2,777</b>	<b>3,303</b>	<b>-526</b>

(\*) including deposits and commercial paper

### 5.2.2.2 Financial liabilities

Financial liabilities at SNCF Réseau comprise:

- Long-term borrowings (bonds, bank and other borrowings)
- Short-term debts, treasury bills and European Commercial Papers
- Derivatives (debt and forward purchase hedging derivatives, trading derivatives)

These liabilities break down into two categories before their measurement:

- Liabilities measured at amortised cost
- Liabilities measured at fair value through profit or loss

#### 5.2.2.2.1 Financial liabilities measured at amortised cost

Long-term borrowings and short-term debt are recognised at amortised cost calculated using the effective interest rate method.

PPP liabilities also fall into this category.

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. SNCF Réseau has repaid the BPL and CNM debts since 2017, the project completion date.

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.

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.

For its internal financing, SNCF Réseau also uses both national and international short-term financing 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.

#### 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 that has reached €10.9 billion since 2014. In 2018, INSEE, in agreement with EUROSTAT, decided to reclassify SNCF Réseau as a public administration as of 2016. The SNCF Réseau reclassified debt amounts for 2016 and 2017 were €35.8 billion and €39.4 billion, respectively. 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.

#### PPP liabilities:

The repayments relating to PPP liabilities amounted to €101 million for BPL, €91 million for CNM and €83 million for GSM-R as at 31/12/2018.

#### 5.2.2.2.1.1 Long-term borrowings

Certain long-term borrowings are subject to:

- fair value hedging against exposure to changes in fair value (e.g. hedging of a fixed-rate borrowing using a derivative swapping a fixed interest rate for a floating interest rate). The carrying amount of the borrowing is therefore adjusted for the change in its fair value attributable to the hedged risk through P&L.

- cash flow hedging against fluctuations in future cash flows (e.g. hedging of floating-rate foreign currency borrowing using a derivative swapping the foreign currency floating rate for a Euro fixed rate). In this case, the borrowing is not subject to any additional measurement other than that applied if it was not hedged.

Foreign currency borrowings, hedged by Cross Currency Swaps on inception, are converted into Euros at the transaction date hedging rate. They are then remeasured at the closing spot rate through P&L.



## 5.2.2.1.1.1 Financing raised in 2018

In € millions	Nominal amount	Currency	Maturity date	Rate
<b>Bond issues</b>				
EMTN RFF 1.125% 25/05/2030 EUR	100	EUR	25/05/2030	1.125%
EMTN RFF 4.125% 22-03-2062 EUR	60	EUR	22/03/2062	4.125%
EMTN RFF 5% 10-10-2033	300	EUR	10/10/2033	5.000%
EMTN SNCF RESEAU EUR 2% MATURING 05-02-2048	1,100	EUR	05/02/2048	2.000%
EMTN SNCF RESEAU EUR 2.029% MATURING 22-01-2048	65	EUR	22/01/2048	2.029%
EMTN SNCFR 1.50% 29-05-2037	500	EUR	29/05/2037	1.500%

## 5.2.2.1.1.2 Bonds

in millions	Nominal foreign currency amount	Currency	Maturity date	Rate
<b>Bonds</b>				
EMTN RFF AUD 3.724% 26/04/2027	90	AUD	26/04/2027	3.724%
BOND CAD 4.70% 01-06-2035	277	CAD	01/06/2035	4.700%
EMTN RFF 2% 12-11-2026 CHF	150	CHF	12/11/2026	2.000%
EMTN RFF 2% 24-11-2034	100	CHF	24/11/2034	2.000%
EMTN RFF 2.625% 10-03-2031	125	CHF	10/03/2031	2.625%
EMTN RFF CHF 2.625% 11-03-37	130	CHF	11/03/2037	2.625%
EMTN RFF CHF 2.875% 26-02-21	300	CHF	26/02/2021	2.875%
EMTN RFF 3% 24-04-2019	450	CHF	24/04/2019	3.000%
RFF 3.25% 30-06-2032 - CHF -	250	CHF	30/06/2032	3.250%
EMTN RFF 2.239% CHF 27-07-2029	100	CHF	27/07/2029	2.239%
EMTN RFF 2.177% 16-07-2019	140	CHF	16/07/2019	2.177%
EMTN RFF 2.77% 30-01-2019	100	CHF	30/01/2019	2.770%
EMTN - RFF 6% 12-10-2020	2,000	EUR	12/10/2020	6.000%
EMTN RFF 0.10% EUR 27-05-2021	1,000	EUR	27/05/2021	0.100%
EMTN RFF 1% 09/11/2031	900	EUR	09/11/2031	1.000%
EMTN RFF 1.125% 25/05/2030 EUR	1,800	EUR	25/05/2030	1.125%
EMTN RFF 2.25% 20/12/2047	750	EUR	20/12/2047	2.250%
EMTN RFF 2.625% 29-12-2025	1,500	EUR	29/12/2025	2.625%
EMTN RFF 3.125% EUR 25-10-2028	2,025	EUR	25/10/2028	3.125%
EMTN RFF 4.25% 07-10-2026	3,600	EUR	07/10/2026	4.250%
EMTN RFF 4.375% 02/06/2022	3,000	EUR	02/06/2022	4.375%
EMTN RFF 4.50% 30-01-2024	3,850	EUR	30/01/2024	4.500%
EMTN RFF 5% 10-10-2033	3,500	EUR	10/10/2033	5.000%
EMTN RFF EUR 1.875% 30/03/2034	1,000	EUR	30/03/2034	1.875%
EMTN SNCF RESEAU EUR 2% MATURING 05-02-2048	1,100	EUR	05/02/2048	2.000%
EMTN SNCFR 1.125% 19-05-2027	650	EUR	19/05/2027	1.125%
EMTN SNCFR 1.475% 30/03/2065	50	EUR	30/03/2065	1.475%
EMTN SNCFR 1.50% 29/05-2037	500	EUR	29/05/2037	1.500%
EMTN SNCFR 1.50% 29-05-2037	750	EUR	29/05/2037	1.500%
RFF OAT IPCH 28-02-2023	2,000	EUR	28/02/2023	2.450%
EMTN - RFF EUR3-0.35% 22-10-19	150	EUR	22/10/2019	-0.035%
EMTN 2.5750% PUIS CMS20Y C/F EUR 04-06-2034	56	EUR	04/06/2034	2.575%
EMTN 3.44% 13/10/2020	55	EUR	13/10/2020	3.440%
EMTN EURIBOR 3M + 0.26% 05-08-2020 NATIXIS	100	EUR	05/08/2020	0.260%
EMTN EURIBOR 3M + 0.26% 05-08-2020 STE GENERALE	100	EUR	05/08/2020	0.260%
EMTN RFF 1.1% 27/10/2036	45	EUR	27/10/2036	1.100%
EMTN RFF 2.00% PUIS CMS10Y C/F 19-09-44	100	EUR	19/09/2044	2.000%
EMTN RFF 22-10-2035 2.195% EUR	60	EUR	22/10/2035	2.195%
EMTN RFF 3.25% PUIS CMS10Y C/F EUR - 09-12-33	120	EUR	09/12/2033	3.250%

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EMTN RFF 3.30% 18-12-2042 EUR	1,825	EUR	18/12/2042	3.300%
EMTN RFF 3.38% 04-06-2063 EUR	200	EUR	04/06/2063	3.380%
EMTN RFF 3.421% 25-11-2024 EUR	100	EUR	25/11/2024	3.421%
EMTN RFF 3.54% 01-02-53	50	EUR	01/02/2053	3.540%
EMTN RFF 4.055% 23-06-2060	50	EUR	23/06/2060	4.055%
EMTN RFF 4.08% 16-01-2062 EUR	50	EUR	16/01/2062	4.080%
EMTN RFF 4.125% 22-03-2062 EUR	915	EUR	22/03/2062	4.125%
EMTN RFF 4.18% 01-04-2030 EUR	50	EUR	01/04/2030	4.180%
EMTN RFF 4.548% 24-05-2032	50	EUR	24/05/2032	4.548%
EMTN RFF CMS10 Y- 0.485%	106	EUR	15/02/2021	-0.485%
EMTN RFF CMS10Y +1.14% CAP/FLOOR 13-02-2042	200	EUR	13/02/2042	1.140%
EMTN RFF CMS10Y+0.65% CAP/FLOOR - 28/10/2041	200	EUR	28/10/2041	0.650%
EMTN RFF CMS10Y+1.22% CAP/FLOOR - 07/06/2032	100	EUR	07/06/2032	1.220%
EMTN RFF CMS20Y+0.235% 25-02-2041	50	EUR	25/02/2041	0.235%
EMTN RFF CMS20Y+0.70% CAP/ FLOOR 23-04-2032	100	EUR	23/04/2032	0.700%
EMTN RFF EUR 2.50% 24-10-2023	50	EUR	24/10/2023	2.500%
EMTN RFF EUR 3.221% 25-04-2045	93	EUR	25/04/2045	3.221%
EMTN RFF EUR 3.234% 25-04-2047	93	EUR	25/04/2047	3.234%
EMTN RFF EUR 3.50% 01-04-2064	50	EUR	01/04/2064	3.500%
EMTN RFF EUR 3.50% 12-02-2064	50	EUR	12/02/2064	3.500%
EMTN RFF EUR 4.255% 16-03-2034	150	EUR	16/03/2034	4.255%
EMTN RFF EUR3M + 0.74 26-12-31	40	EUR	26/12/2031	0.740%
EMTN RFF EUR6+0.52% 29-07-24	48	EUR	29/07/2024	0.520%
EMTN RFF EURIB 3M+0.33% 27-07-2029 EUR	43	EUR	27/07/2029	0.330%
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 RFF IPCH+2.384% 17-03-2048	350	EUR	17/03/2048	2.384%
EMTN RFF ZERO COUPON MATURING 01-07-2036	140	EUR	01/07/2036	0.010%
EMTN RFF ZERO COUPON MATURING 10-02-2031	116	EUR	10/02/2031	0.010%
EMTN SNCF RESEAU EUR 2.029% MATURING 22-01-2048	65	EUR	22/01/2048	2.029%
EMTN SNCF RESEAU EUR 2.303% 11-07-2067	50	EUR	11/07/2067	2.303%
EMTN SNCFR 2.777% 29-07-2115 EUR	65	EUR	29/07/2115	2.777%
RFF EMTN EUR3M+0.41% 25-01-2030	75	EUR	25/01/2030	0.410%
EMTN - RFF 5.25% 31-01-2035 £	475	GBP	31/01/2035	5.250%
EMTN - RFF 5.35% 12-07-2029	326	GBP	12/07/2029	5.350%
EMTN - RFF 5.5% 01-12-2021 £	800	GBP	01/12/2021	5.500%
EMTN - RFF 5.25% 07-12-2028 £	650	GBP	07/12/2028	5.250%
EMTN RFF 4.83% 25-03-2060 £	550	GBP	25/03/2060	4.830%
EMTN RFF 5% 11-03-2052 £	550	GBP	11/03/2052	5.000%
EMTN - RFF RPI UK 22-07-2030 £	50	GBP	22/07/2030	0.000%
EMTN - RFF Zcpn 14-04-2038 £	214	GBP	14/04/2038	0.000%
EMTN RFF HKD 2.77% 13/10/2025	937	HKD	13/02/2025	2.770%
EMTN 1.713% 10/08/2020 JPY	10,000	JPY	10/08/2020	1.713%
EMTN DUAL CUR JP/US 20/12/2027	3,500	JPY	20/12/2027	2.390%
EMTN DUAL CUR JP/US 26/11/2027	3,500	JPY	26/11/2027	2.411%
EMTN RFF 1.91% 27-04-2027 JPY	6,000	JPY	27/04/2027	1.910%
EMTN RFF 1.9550 08-11-2021 JPY	10,000	JPY	08/11/2021	1.955%
EMTN RFF 2.065% 08-02-2022	7,000	JPY	08/02/2022	2.065%
EMTN RFF JPY 2.13% 05-08-2019	5,000	JPY	05/08/2019	2.130%
EMTN SNCF RESEAU ZC 0% 19-05-2047	10,173	JPY	19/05/2047	0.000%
EMTN RFF 5% 30-03-2032 NOK	500	NOK	30/03/2032	5.000%
EMTN RFF SEK 2.83% 28/04/2047	500	SEK	28/04/2047	2.830%
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 SNCF RESEAU SEK 2.49% 12-06-2047	510	SEK	12/06/2047	2.490%
EMTN SNCF RESEAU SEK 2.581% 30/10/2047	400	SEK	30/10/2047	2.581%
EMTN RFF 1.375% 11/10/2019 USD	1,000	USD	11/10/2019	1.375%
EMTN SNCF RESEAU 2% 13/10/2020 USD	1,500	USD	13/10/2020	2.000%
EMTN RFF 4.20% 19-05-2044 USD	120	USD	19/05/2044	4.200%

**5.2.2.1.1.3 SNCF loans**

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:

**31/12/2018**

in millions	Nominal foreign currency amount	Currency	Average maturity	IFRS value in euros
<b>SNCF borrowings</b>				<b>686</b>
Fixed	613	EUR	2023	635
Floating	52	EUR	2021	52

**31/12/2017**

in millions	Nominal foreign currency amount	Currency	Average maturity	IFRS value in euros
<b>SNCF borrowings</b>				<b>691</b>
Fixed	613	EUR	2023	635
Floating	56	EUR	2021	57

**5.2.2.1.1.4 Bank and other borrowings**
**31/12/2018**

in millions	Nominal foreign currency amount	Currency	Average maturity	IFRS value in euros
<b>Bank borrowings</b>				<b>426</b>
2007 EIB loan	75	EUR	2033	75
2016-1 EIB loan	200	EUR	2038	202
2016-2 EIB loan	150	EUR	2038	150
Syndicated credit	1,500	EUR	2022	
<b>Other borrowings, including</b>				
Loan from Greater Paris region	30	EUR	2028	30
Deposits and securities				5

**31/12/2017**

in millions	Nominal foreign currency amount	Currency	Average maturity	IFRS value in euros
<b>Bank borrowings</b>				<b>427</b>
2007 EIB loan	75	EUR	2033	75
2016-1 EIB loan	200	EUR	2038	202
2016-2 EIB loan	150	EUR	2038	150
Syndicated credit	1,500	EUR	2022	
<b>Other borrowings, including</b>				
Loan from Greater Paris region	34	EUR	2028	32
Deposits and securities				5

## 5.2.2.1.2 Cash borrowings and overdrafts

Short-term foreign currency debt is recorded for its Euro counter-value on the transaction date, and remeasured at the closing spot rate through P&L. They are subject to an economic hedge based on foreign currency forward purchases.

Cash borrowings primarily comprise:

- Short-term liabilities of more than 3 months and less than 1 year:
  - o In Euros: €1,051 million as at 31/12/2018 vs. €0 million as at 31/12/2017)
  - o In US Dollars: €1,387 million as at 31/12/2018 vs. €1,613 million as at 31/12/2017)
  - o In Pound Sterling: €340 million as at 31/12/2018 vs. €0 million as at 31/12/2017)
  - o In Australian Dollars: €78 million as at 31/12/2018 vs. €0 million as at 31/12/2017)
- Collateral cash liabilities hedging asset derivative financial instruments (€91 million as at 31/12/2018 vs. €64 million as at 31/12/2017).

Overdrafts (€20 million as at 31/12/2018 vs. €23 million as at 31/12/2017) mainly comprise current accounts and bank loans.

## 5.2.2.2 Financial liabilities measured at fair value through profit or loss

This category comprises:

- Liability derivative instruments entered into by the Group to manage its interest rate and foreign currency risks
- Liability derivative instruments not qualified for hedging

The SNCF Réseau derivative portfolio comprises debt hedging derivative instruments, and to a lesser extent, trading derivative instruments. The main derivatives used are interest rate swaps, forward currency contracts and cross currency swaps.

Derivatives are initially recognised at fair value on the contract signature date and remeasured in the balance sheet to their fair value at closing.

Changes in value recorded in P&L on fair value hedging derivatives are offset with those of the FVH borrowings, for approximately the hedge ineffectiveness.

Changes in value of cash-flow hedging derivatives are recognised in equity for the effective portion of the hedge and in P&L for the ineffective portion. The amounts deferred to equity are returned to P&L when the hedged cash flows impact the latter.

Changes in value of derivatives not qualified for hedging are recognised in P&L for the period under net finance cost.

Hedging derivative instruments and their risk management are presented in Note 5.3. The amounts of derivative instruments not qualified for hedging are presented in the table below.

in millions	31/12/2018				31/12/2017			
	Fair value in euros		Notional foreign currency amount		Fair value in euros		Notional foreign currency amount	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Asset derivative instruments	-	-			0	51		
US dollar	-	-	-	-	0	51	100	1,843
Interest rate derivatives (euros)	2	14	50	156	1	16	60	146
Embedded derivatives (euros)	10	2	211	156	14	1	211	156
Total derivatives not qualified for hedging	12	16			15	69		

### 5.3 FINANCIAL INSTRUMENTS AND ASSOCIATED RISK MANAGEMENT

The Group designates certain derivatives as foreign currency and interest rate hedging instruments, in fair value or cash flow hedges.

The Group therefore documents upon inception of the hedge:

- the economic relationship between the hedging instrument and the hedged item (derivative and the hedged borrowing)
- its risk management objective
- and the hedging strategy for undertaking each hedging relationship.

Under IFRS 9, the following can now be excluded from the hedging relationship:

- The Foreign Currency Basis Spread component relating to Cross Currency type instruments, whose changes in fair value can as an option be recognised in OCI
- The “premium/discount” component of a forward contract, whose changes in fair value can as an option be recognised in OCI

SNCF Réseau maintains the option of excluding these items to limit hedging ineffectiveness and P&L volatility.

The items recognised in OCI will be “recycled” to P&L over the hedging period according to the Time Related method.

The Group also uses the option of hedging an aggregated exposure (borrowing already hedged by a derivative) using a second derivative in a second hedging relationship for all relationships satisfying all the conditions required by IFRS 9 as of 1 January 2018.

By convention, debts belonging to an aggregated exposure are presented in tables corresponding to the second qualification of the hedge to which they are subject.

#### 5.3.1 Overall risk management policy

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.

Due to its financial business, SNCF Réseau is exposed to the following risks:

- interest rate risks: risk of future interest rate fluctuations for the holder of a fixed or floating-rate receivable or payable
- foreign currency risks: risk of future exchange rate fluctuations for the holder of a receivable or payable
- liquidity risks: risk of not having enough funds to satisfy commitments
- credit and counterparty risks: risk arising for a creditor from the inability of a debtor to honour all or part of his debt at maturity

#### 5.3.2 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.

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.

Compliance with this allocation is checked on a daily basis.

To achieve this breakdown, SNCF Réseau may use option-based derivatives or interest rate swaps for hedging purposes.

#### 5.3.2.1 Debt structure before and after currency hedging

The breakdown by interest rate of loans and borrowings, before and after adjustment for derivatives is as follows:

Debt structure	Before hedging		After hedging	
	31/12/2018	31/12/2017	31/12/2018	31/12/2017
In € millions				
Fixed rate	44,443	43,402	44,351	42,977
Floating rate	1,561	1,484	3,276	3,351
Inflation rate	3,731	3,520	2,108	2,078
<b>Total LT borrowings</b>	<b>49,735</b>	<b>48,405</b>	<b>49,735</b>	<b>48,405</b>
ST borrowings	2,856	1,613	2,856	1,613
<b>Total borrowings</b>	<b>52,591</b>	<b>50,019</b>	<b>52,591</b>	<b>50,019</b>

#### 5.3.2.2 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;

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- fair value option debts;
- derivative instruments not qualified as hedges in the meaning of IFRS 9;
- 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 non-derivative 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 2018, 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 2017.

In € millions	31/12/2018				31/12/2017			
	Profit or loss		Equity		Profit or loss		Equity	
	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);	4	-4	-	-	6	-6	-	-
Floating-rate net debt (after taking into account fair value hedges)	4	-4	-	-	6	-6	-	-
Fair value option debt	-	-	-	-	-	-	-	-
Derivatives not qualified as hedges	2	-3	-	-	2	-2	-	-
Derivatives qualified as cash flow hedges	24	-28	648	-723	15	-18	726	-812
<b>Total impact</b>	<b>30</b>	<b>-34</b>	<b>648</b>	<b>-723</b>	<b>23</b>	<b>-26</b>	<b>726</b>	<b>-812</b>

### 5.3.3 Management of currency risk

#### 5.3.3.1 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								
	AUD	CAD	CHF	GBP	HKD	JPY	NOK	SEK	USD
<b>31/12/2018</b>									
Foreign currency-denominated debt	90	277	1,845	3,615	937	55,173	500	2,290	2,620
Foreign currency derivatives	90	277	1,845	3,615	937	55,173	500	2,290	2,620
Net foreign currency exposure	-	-	-	-	-	-	-	-	-
<b>31/12/2017</b>									
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	-	-	-	-	-	-	-	-	-

#### 5.3.3.2 Debt structure before and after currency hedging

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.

The breakdown by currency of loans and borrowings, before and after adjustment for derivatives (hedging and trading), is as follows:

Debt structure In € millions	Before hedging		After hedging	
	31/12/2018	31/12/2017	31/12/2018	31/12/2017
Euro	40,170	38,857	49,735	48,405
Pound sterling	4,360	4,410	-	-
US dollar	2,291	2,186	-	-
Yen	460	430	-	-
Swiss franc	1,791	1,836	-	-
Norwegian krone	61	63	-	-
Swedish krona	226	236	-	-
Canadian dollar	213	226	-	-
Hong Kong dollar	107	102	-	-
Australian dollar	56	59	-	-
<b>Total borrowings</b>	<b>49,735</b>	<b>48,405</b>	<b>49,735</b>	<b>48,405</b>

### 5.3.4 Liquidity risk management

#### 5.3.4.1 Liquidity management policy

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 short-term (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 28 June 2022. This credit facility was not used in 2018.

#### 5.3.4.2 Debt maturity schedule

In € millions	31/12/2018	31/12/2017
Less than 1 year	1,548	1,187
1 to 5 years	12,511	10,999
5 to 10 years	13,938	14,050
10 to 20 years	12,679	13,860
20 years and thereafter	9,067	8,146
<b>Loans and borrowings excluding the fair value impact</b>	<b>49,744</b>	<b>48,243</b>
Changes in fair value (designated at "fair value")	-	-
Changes in fair value (hedge accounting)	-9	162
<b>Loans and borrowings</b>	<b>49,735</b>	<b>48,405</b>
Fair value of non-current asset and liability derivatives	1,404	1,185
Fair value of current asset and liability derivatives	-177	36
<b>Loans and borrowings (including asset and liability derivatives)</b>	<b>50,962</b>	<b>49,626</b>

5.3.4.3 Maturity schedule of contractual cash flows

In € millions	31/12/2018						31/12/2017					
	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
<b>Bonds</b>	<b>-65,833</b>	<b>-3,185</b>	<b>-17,197</b>	<b>-17,342</b>	<b>-15,640</b>	<b>-12,468</b>	<b>-64,235</b>	<b>-2,510</b>	<b>-15,721</b>	<b>-16,980</b>	<b>-17,210</b>	<b>-11,815</b>
Share capital	-47,279	-1,675	-11,966	-13,136	-11,480	-9,022	-45,738	-1,107	-10,556	-12,598	-13,007	-8,470
Interest cash flow	-18,555	-1,510	-5,232	-4,207	-4,160	-3,446	-18,497	-1,403	-5,165	-4,382	-4,202	-3,345
<b>Bank borrowings</b>	<b>-516</b>	<b>-5</b>	<b>-18</b>	<b>-23</b>	<b>-470</b>	<b>-</b>	<b>-509</b>	<b>-4</b>	<b>-16</b>	<b>-20</b>	<b>-115</b>	<b>-354</b>
Share capital	-425	-	-	-	-425	-	-425	-	-	-	-75	-350
Interest cash flow	-91	-5	-18	-23	-45	-	-84	-4	-16	-20	-40	-4
<b>SNCF borrowings</b>	<b>-937</b>	<b>-58</b>	<b>-878</b>	<b>-1</b>	<b>-0</b>	<b>-</b>	<b>-995</b>	<b>-59</b>	<b>-267</b>	<b>-669</b>	<b>-0</b>	<b>-</b>
Share capital	-665	-3	-661	-1	-0	-	-670	-5	-50	-614	-0	-
Interest cash flow	-272	-54	-218	-	-	-	-325	-54	-217	-54	-	-
<b>Other borrowings</b>	<b>-35</b>	<b>-3</b>	<b>-14</b>	<b>-10</b>	<b>-3</b>	<b>-5</b>	<b>-38</b>	<b>-3</b>	<b>-14</b>	<b>-12</b>	<b>-4</b>	<b>-5</b>
Share capital	-35	-3	-14	-10	-3	-5	-38	-3	-14	-12	-4	-5
Interest cash flow	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cash borrowings</b>	<b>-2,856</b>	<b>-2,856</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-1,633</b>	<b>-1,633</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Share capital	-2,863	-2,863	-	-	-	-	-1,620	-1,620	-	-	-	-
Interest cash flow	7	7	-	-	-	-	-13	-13	-	-	-	-
<b>Gross borrowings</b>	<b>-70,177</b>	<b>-6,107</b>	<b>-18,108</b>	<b>-17,376</b>	<b>-16,113</b>	<b>-12,473</b>	<b>-67,410</b>	<b>-4,209</b>	<b>-16,017</b>	<b>-17,681</b>	<b>-17,329</b>	<b>-12,174</b>
<b>Financial assets</b>	<b>485</b>	<b>-202</b>	<b>171</b>	<b>510</b>	<b>-</b>	<b>6</b>	<b>255</b>	<b>-230</b>	<b>-183</b>	<b>662</b>	<b>-</b>	<b>6</b>
Interest cash flow on hedging derivatives - negative fair value	-1,069	-28	-184	-304	-366	-187	-858	15	-36	-247	-376	-213
Interest cash flow on trading derivatives - negative fair value	-24	-4	-7	-	-5	-9	-27	-4	-11	-0	-3	-10
Interest cash flow on hedging derivatives - positive fair value	700	42	22	201	268	166	711	21	24	162	317	187
Interest cash flow on trading derivatives - positive fair value	14	1	2	3	6	2	14	1	3	3	6	1
<b>Derivative financial instruments</b>	<b>-379</b>	<b>12</b>	<b>-167</b>	<b>-100</b>	<b>-97</b>	<b>-28</b>	<b>-160</b>	<b>33</b>	<b>-20</b>	<b>-82</b>	<b>-57</b>	<b>-34</b>
<b>Liability margin calls</b>	<b>-91</b>	<b>-91</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-64</b>	<b>-64</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Asset margin calls</b>	<b>1,120</b>	<b>1,120</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,084</b>	<b>1,084</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>PPP payables</b>	<b>-4,115</b>	<b>-289</b>	<b>-1,133</b>	<b>-1,102</b>	<b>-1,592</b>	<b>-</b>	<b>-4,380</b>	<b>-289</b>	<b>-1,125</b>	<b>-1,177</b>	<b>-1,789</b>	<b>-</b>
Share capital	-2,717	-279	-950	-736	-752	-	-2,736	-270	-915	-759	-791	-
Interest cash flow	-1,399	-10	-183	-365	-840	-	-1,645	-18	-210	-418	-998	-
<b>Grant receivable - PPP</b>	<b>4,018</b>	<b>275</b>	<b>1,116</b>	<b>1,036</b>	<b>1,591</b>	<b>-</b>	<b>4,336</b>	<b>318</b>	<b>1,113</b>	<b>1,116</b>	<b>1,789</b>	<b>-</b>
Share capital	2,650	266	940	692	751	-	2,719	301	907	720	792	-
Interest cash flow	1,368	9	176	343	840	-	1,617	17	206	396	998	-
<b>PPP payables and receivables</b>	<b>-98</b>	<b>-14</b>	<b>-17</b>	<b>-66</b>	<b>-1</b>	<b>-</b>	<b>-44</b>	<b>30</b>	<b>-12</b>	<b>-62</b>	<b>0</b>	<b>-</b>

For financial liabilities, contractual cash flows are not discounted, corresponding to amounts to be repaid, including interest, whose floating-rate portion is pegged to the 31 December fixing of each fiscal year.



### 5.3.5 Credit and 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.

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.

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.

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."

31/12/2018	Gross amounts (a)	Amounts offset in the balance sheet (b)	Net amounts presented in the balance sheet (c=a-b)	Amounts not offset in the balance sheet		Net amounts based on IFRS 7 (f=c-d-e)
				Hedging cash collateral (d)	Derivative instruments (e)	
<b>In € millions</b>						
Asset derivatives	1,079	-	1,079	84	993	2
Liability derivatives	2,306	-	2,306	1,079	993	234
31/12/2017	Gross amounts (a)	Amounts offset in the balance sheet (b)	Net amounts presented in the balance sheet (c=a-b)	Amounts not offset in the balance sheet		Net amounts based on IFRS 7 (f=c-d-e)
				Hedging cash collateral (d)	Derivative instruments (e)	
<b>In € millions</b>						
Asset derivatives	1,092	-	1,092	64	1,024	4
Liability derivatives	2,313	-	2,313	1,044	1,024	246

5.3.6 Summary of hedging transaction impacts

5.3.6.1 Information on fair value hedges

Fair value hedges can cover either interest rate risk or foreign currency risk or both at the same time. The table below summarizes the impacts arising from the hedge accounting of hedged items and hedging instruments.

31/12/2018	Carrying amount of derivatives		Change in derivative FV for ineffectiveness calculation	Carrying amount of the hedged item		FVH adjustment in the debt carrying amount		Change in FV of the hedged item	Hedging ineffectiveness	Reserves relating to hedging costs	
	Assets	Liabilities		Assets	Liabilities	Continuing hedging	Discontinued hedging			In total	For the period
In € millions											
<b>Fair value hedge (FVH)</b>											
<b>Currency risk</b>	<b>490</b>	<b>176</b>	<b>-15</b>	<b>-</b>	<b>4,142</b>	<b>-189</b>	<b>126</b>	<b>-10</b>	<b>-26</b>	<b>-9</b>	<b>-2</b>
Cross Currency Swaps*	438	170	-44					19	-26	-8	-2
Foreign currency purchases and sales	52	6	29					-29	-0	-0	-0
<b>Interest rate risk</b>	<b>73</b>	<b>4</b>	<b>-9</b>	<b>483</b>	<b>375</b>	<b>-62</b>	<b>-</b>	<b>9</b>	<b>-0</b>	<b>-</b>	<b>-</b>
Interest rate swaps	73	4	-9					9	-0	-	-
* of which CCS rate	-1	-30							-26		

The ineffectiveness presented as an foreign currency risk fully corresponds to the cross currency swap rate.

31/12/2017	Carrying amount of derivatives		Change in derivative FV for ineffectiveness calculation	Carrying amount of the hedged item		FVH adjustment in the debt carrying amount		Change in FV of the hedged item	Hedging ineffectiveness	Reserves relating to hedging costs	
	Assets	Liabilities		Assets	Liabilities	Continuing hedging	Discontinued hedging			In total	For the period
In € millions											
<b>Fair value hedge (FVH)</b>											
<b>Currency risk</b>	<b>447</b>	<b>137</b>	<b>-285</b>	<b>-</b>	<b>2,423</b>	<b>412</b>	<b>138</b>	<b>285</b>	<b>-</b>	<b>-</b>	<b>-</b>
Cross Currency Swaps*	447	137	-285					285	-	-	-
Foreign currency purchases and sales	-	-	-					-	-	-	-
<b>Interest rate risk</b>	<b>78</b>	<b>-</b>	<b>-17</b>	<b>-</b>	<b>388</b>	<b>-56</b>	<b>-</b>	<b>4</b>	<b>-13</b>	<b>-</b>	<b>-</b>
Interest rate swaps	78	-	-17					4	-13	-	-
* of which CCS rate	23	-							-		

**5.3.6.2 Information on cash value hedges**

Cash value hedges can cover either interest rate risk or foreign currency risk or both at the same time. The table below summarizes the impacts arising from the hedge accounting of hedged items and hedging instruments.

31/12/2018	Carrying amount of derivatives		Change in derivative FV for ineffectiveness calculation	Balance of hedging reserves		Reserves recycled to P&L		Reserves relating to hedging costs		Carrying amount of the hedged item		Change in FV of the hedged item	Hedging ineffectiveness
	Assets	Liabilities		On continuing hedging	On discontinued hedging	As the hedged item has impacted P&L	As the hedged item no longer exists	In total	For the period	Assets	Liabilities		
<b>In € millions</b>													
<b>Cash flow hedge (CFH)</b>													
<b>Currency risk</b>	<b>435</b>	<b>1,577</b>	<b>-149</b>	<b>-431</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-149</b>	<b>55</b>	<b>-</b>	<b>7,080</b>	<b>146</b>	<b>-2</b>
Cross Currency Swaps*	435	1,577	-149	-431	-	-	-	-149	55			146	-2
Foreign currency purchases and sales	-	-	-	-	-	-	-	-	-			-	-
<b>Interest rate risk</b>	<b>69</b>	<b>533</b>	<b>37</b>	<b>-548</b>	<b>-181</b>	<b>1</b>	<b>-13</b>	<b>-12</b>	<b>-12</b>	<b>-</b>	<b>2,732</b>	<b>-36</b>	<b>1</b>
Interest rate swaps	69	533	37	-548	-181	-	-	-12	-12			-36	1
* of which CCS rate	18	-159											-2

The ineffectiveness presented as a foreign currency risk fully corresponds to the cross currency swap rate.

31/12/2017	Carrying amount of derivatives		Change in derivative FV for ineffectiveness calculation	Balance of hedging reserves		Reserves recycled to P&L		Reserves relating to hedging costs		Carrying amount of the hedged item		Change in FV of the hedged item	Hedging ineffectiveness
	Assets	Liabilities		On continuing hedging	On discontinued hedging	As the hedged item has impacted P&L	As the hedged item no longer exists	In total	For the period	Assets	Liabilities		
<b>In € millions</b>													
<b>Cash flow hedge (CFH)</b>													
<b>Currency risk</b>	<b>495</b>	<b>1,569</b>	<b>-177</b>	<b>-397</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,989</b>	<b>177</b>	<b>-</b>
Cross Currency Swaps*	495	1,569	-177	-397	-	-	-	-	-			177	-
Foreign currency purchases and sales	-	-	-	-	-	-	-	-	-			-	-
<b>Interest rate risk</b>	<b>57</b>	<b>539</b>	<b>136</b>	<b>-390</b>	<b>-197</b>	<b>0</b>	<b>-14</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,538</b>	<b>-132</b>	<b>4</b>
Interest rate swaps	57	539	136	-390	-197	-	-	-	-			-132	4
* of which CCS rate	25	-											-

5.3.6.3 Flow amounts, maturity and degree of uncertainty

31/12/2018

In euro millions (at the year-end exchange rate)	Nominal commitments received	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
<b>Fair value hedge (FVH)</b>						
<b>Currency risk</b>	<b>4,154</b>	<b>2,426</b>	<b>926</b>	<b>103</b>	<b>699</b>	<b>-</b>
Cross Currency Swap	2,340	612	926	103	699	-
Foreign currency purchases and sales	1,813	1,813	-	-	-	-
<b>Interest rate risk</b>	<b>890</b>	<b>-</b>	<b>454</b>	<b>386</b>	<b>50</b>	<b>-</b>
Interest rate swaps	890	-	454	386	50	-
<b>Total</b>	<b>5,043</b>	<b>2,426</b>	<b>1,380</b>	<b>489</b>	<b>749</b>	<b>-</b>

31/12/2017

In euro millions (at the year-end exchange rate)	Nominal commitments received	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
<b>Fair value hedge (FVH)</b>						
<b>Currency risk</b>	<b>2,153</b>	<b>85</b>	<b>1,358</b>	<b>96</b>	<b>613</b>	<b>-</b>
Cross Currency Swap	2,153	85	1,358	96	613	-
Foreign currency purchases and sales	-	-	-	-	-	-
<b>Interest rate risk</b>	<b>300</b>	<b>-</b>	<b>150</b>	<b>100</b>	<b>50</b>	<b>-</b>
Interest rate swaps	300	-	150	100	50	-
<b>Total</b>	<b>2,453</b>	<b>85</b>	<b>1,508</b>	<b>196</b>	<b>663</b>	<b>-</b>

31/12/2018

In euro millions (at the year-end exchange rate)	Nominal commitments given	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
<b>Fair value hedge (FVH)</b>						
<b>Currency risk</b>	<b>4,108</b>	<b>2,214</b>	<b>1,104</b>	<b>115</b>	<b>676</b>	<b>-</b>
Cross Currency Swap	2,351	457	1,104	115	676	-
Foreign currency purchases and sales	1,757	1,757	-	-	-	-
<b>Interest rate risk</b>	<b>890</b>	<b>-</b>	<b>454</b>	<b>386</b>	<b>50</b>	<b>-</b>
Interest rate swaps	890	-	454	386	50	-
<b>Total</b>	<b>4,998</b>	<b>2,214</b>	<b>1,557</b>	<b>500</b>	<b>726</b>	<b>-</b>

31/12/2017

In euro millions (at the year-end exchange rate)	Nominal commitments given	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
<b>Fair value hedge (FVH)</b>						
<b>Currency risk</b>	<b>2,221</b>	<b>70</b>	<b>1,444</b>	<b>115</b>	<b>593</b>	<b>-</b>
Cross Currency Swap	2,221	70	1,444	115	593	-
Foreign currency purchases and sales	-	-	-	-	-	-
<b>Interest rate risk</b>	<b>300</b>	<b>-</b>	<b>150</b>	<b>100</b>	<b>50</b>	<b>-</b>
Interest rate swaps	300	-	150	100	50	-
<b>Total</b>	<b>2,521</b>	<b>70</b>	<b>1,594</b>	<b>215</b>	<b>643</b>	<b>-</b>

31/12/2018

In euro millions (at the year-end exchange rate)	Nominal commitments received	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
<b>Cash flow hedge (CFH)</b>						
Currency risk	7,186	1,179	1,826	1,020	1,522	1,639
Cross Currency Swap	7,186	1,179	1,826	1,020	1,522	1,639
Foreign currency purchases and sales	-	-	-	-	-	-
Interest rate risk	3,361	116	1,554	80	1,111	500
Interest rate swaps	3,361	116	1,554	80	1,111	500
<b>Total</b>	<b>10,547</b>	<b>1,295</b>	<b>3,380</b>	<b>1,100</b>	<b>2,633</b>	<b>2,139</b>

31/12/2017

In euro millions (at the year-end exchange rate)	Nominal commitments received	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
<b>Cash flow hedge (CFH)</b>						
Currency risk	6,790	-	2,711	287	1,916	1,877
Cross Currency Swap	6,790	-	2,711	287	1,916	1,877
Foreign currency purchases and sales	-	-	-	-	-	-
Interest rate risk	3,629	-	367	1,304	1,079	880
Interest rate swaps	3,629	-	367	1,304	1,079	880
<b>Total</b>	<b>10,419</b>	<b>-</b>	<b>3,078</b>	<b>1,591</b>	<b>2,995</b>	<b>2,757</b>

31/12/2018

In euro millions (at the year-end exchange rate)	Nominal commitments given	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
<b>Cash flow hedge (CFH)</b>						
Currency risk	8,002	1,124	1,840	1,319	1,831	1,888
Cross Currency Swap	8,002	1,124	1,840	1,319	1,831	1,888
Foreign currency purchases and sales	-	-	-	-	-	-
Interest rate risk	3,361	116	1,554	80	1,111	500
Interest rate swaps	3,361	116	1,554	80	1,111	500
<b>Total</b>	<b>11,363</b>	<b>1,240</b>	<b>3,394</b>	<b>1,399</b>	<b>2,942</b>	<b>2,388</b>

31/12/2017

In euro millions (at the year-end exchange rate)	Nominal commitments given	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and thereafter
<b>Cash flow hedge (CFH)</b>						
Currency risk	7,748	-	2,834	287	2,430	2,196
Cross Currency Swap	7,748	-	2,834	287	2,430	2,196
Foreign currency purchases and sales	-	-	-	-	-	-
Interest rate risk	3,629	-	367	1,304	1,079	880
Interest rate swaps	3,629	-	367	1,304	1,079	880
<b>Total</b>	<b>11,377</b>	<b>-</b>	<b>3,201</b>	<b>1,591</b>	<b>3,509</b>	<b>3,076</b>

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### 5.4 NET BORROWING COSTS

Net borrowing costs consist of:

- Interest paid on current and non-current borrowings,
- Interest received on granted receivables and available cash balances,
- Debt and cash foreign exchange gains and losses,
- Net changes in fair value and hedges,
- P&L on financial instruments not qualified for hedging,
- The ineffective portion of hedging financial instruments,

“Net borrowing and other costs” breaks down as follows:

In € millions	31/12/2018	31/12/2017	Change
P&L on liabilities at amortised cost	-1,299		
P&L on assets at amortised cost	0		
P&L on hedging transactions*	41		
P&L on other instruments at FV through P&L	2		
Foreign exchange gains and losses	0		
<b>Net borrowing costs</b>	<b>-1,255</b>	<b>-1,248</b>	<b>-7</b>
Other financial expenses	-2	-27	25
Other financial income	10	-113	-103
<b>Net borrowing and other costs</b>	<b>-1,247</b>	<b>-1,163</b>	<b>-84</b>

\* Of which -€4.6 million for the reverse discounting of the PPPs

Analysis of P&L on hedging transactions:

In € millions	31/12/2018	31/12/2017	Change
P&L of derivatives not qualified for fair value hedging including:	95		
Interest for the period on fair value hedging swaps	94		
Change in fair value of derivatives designated as fair value hedges	-21		
Amortisation of the premium/discount of foreign currency derivatives	22		
The change in fair value of fair value hedged assets and liabilities	-5		
<b>Profit or loss on fair value hedge</b>	<b>90</b>		
Interest for the period on cash flow hedging swaps	-31		
Transfer to P&L of amounts deferred in equity	-12		
Hedging ineffectiveness	-1		
<b>Profit or loss on cash flow hedge</b>	<b>-44</b>		

Analysis of P&L of other financial instruments measured at fair value:

In € millions	31/12/2018	31/12/2017	Change
Profit or loss from derivatives not qualified for hedging, including:	8		
Net interest collected or paid on swaps not qualified for hedging	-1		
Change in fair value of derivatives qualified for hedging	9		
Profit or loss on assets at fair value through profit or loss	-6		

## 5.5 RECONCILIATION WITH CASH FLOW FROM/(USED IN) FINANCING ACTIVITIES

The following table shows the reconciliation between balance sheet debt headings and cash flows from/(used in) financing activities:

In € millions	Cash flow from/(used in) financing activities					"Non-cash" changes		
	31/12/2017	Issues of borrowings / loans	Repayment of borrowings / loans	Cash inflows / outflows on PPP receivables and liabilities	Change in cash liabilities and assets	Fair value changes	Other	31/12/2018
<b>Liabilities</b>	<b>-55,132</b>	<b>-2,277</b>	<b>1,179</b>	<b>275</b>	<b>-1,179</b>	<b>-139</b>	<b>-430</b>	<b>-57,704</b>
Bonds	-47,251	-2,277	1,170	-	-	-69	-162	-48,589
Bank borrowings	-427	-	-	-	-	-1	4	-424
SNCF borrowings	-691	-	5	-	-	-0	-	-686
Other borrowings	-36	-0	3	-	-	-	-2	-35
Liability derivatives	-2,313	-	-	-	-	174	-166	-2,306
Short-term debt and collateral liabilities	-1,678	-	-	-	-1,179	-90	-	-2,946
PPP payables	-2,736	-	-	275	-	-153	-103	-2,717
<b>Assets</b>	<b>4,944</b>	<b>-</b>	<b>-</b>	<b>-271</b>	<b>-14</b>	<b>-33</b>	<b>222</b>	<b>4,848</b>
Short-term investments and collateral assets	1,134	-	-	-	-14	-	0	1,120
Asset derivatives	1,092	-	-	-	-	-182	169	1,079
PPP receivables	2,719	-	-	-271	-	149	53	2,650
<b>Total liabilities and assets relating to financing activities (1)</b>	<b>-50,188</b>	<b>-2,277</b>	<b>1,179</b>	<b>4</b>	<b>-1,193</b>	<b>-172</b>	<b>-207</b>	<b>-52,856</b>
<b>Liabilities</b>	<b>-23</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-20</b>
Overdrafts	-23	-	-	-	3	-	-	-20
<b>Assets</b>	<b>3,580</b>	<b>230</b>	<b>-0</b>	<b>-</b>	<b>-528</b>	<b>4</b>	<b>-0</b>	<b>3,286</b>
Loans, receivables and investments	255	230	-0	-	0	4	-0	489
Marketable securities	2,231	-	-	-	-322	-0	-0	1,908
Cash at bank and in hand	1,095	-	-	-	-206	-	-	889
<b>Total other financial liabilities and assets (2)</b>	<b>3,557</b>	<b>230</b>	<b>-0</b>	<b>-</b>	<b>-525</b>	<b>4</b>	<b>-0</b>	<b>3,266</b>
of which other financial assets	255	230	-0	-	0	4	-0	489
of which cash and cash equivalents	3,303	-	-	-	-525	-0	-0	2,777
<b>TOTAL NET DEBT (1)+(2)</b>	<b>-46,630</b>	<b>-2,047</b>	<b>1,178</b>	<b>4</b>	<b>-1,719</b>	<b>-168</b>	<b>-207</b>	<b>-49,590</b>

## Reconciliation between change in IFRS net debt and Free Cash Flow

In € millions	31/12/2017	Free cash flow	Non-cash changes	31/12/2018
Liabilities relating to financing activities	-55,132	-2,003	-569	-57,704
Assets relating to financing activities	4,944	-285	189	4,848
Other financial assets	255	230	4	489
Cash and cash equivalents	3,303	-525	-0	2,777
<b>IFRS net debt</b>	<b>-46,630</b>	<b>-2,584</b>	<b>-376</b>	<b>-49,590</b>
Of which operating cash flow		1,612 (1)		
Of which cash flow used in investing activities		-3,162 (2)		
Excluding changes in loans and advances granted *		230 (3)		
Of which interest paid		-1,265 (4)		
Excluding changes in the financial WCR of accrued interest receivable		82 (5)		
<b>Free cash flow</b>		<b>-2,502</b>	<b>(1)+(2)+(3)+(4)+(5)</b>	

\* Eole loans are considered as financial items within the meaning of net debt, whereas they are considered as investment flows within the meaning of the cash flow statement.

In € millions	Cash flow from/(used in) financing activities					"Non-cash" changes		
	31/12/2016	Issues of borrowings / loans	Repayment of borrowings / loans	Cash inflows / outflows on PPP receivables and liabilities	Change in cash liabilities and assets	Fair value changes	Other	31/12/2017
<b>Liabilities</b>	<b>-52,172</b>	<b>-4,878</b>	<b>1,386</b>	<b>63</b>	<b>-107</b>	<b>777</b>	<b>-200</b>	<b>-55,132</b>
Bonds	-44,430	-4,878	1,377	-	-	680	0	-47,251
Bank borrowings	-427	-	-	-	-	-1	1	-427
SNCF borrowings	-697	-	6	-	-	0	-	-691
Other borrowings	-39	-0	3	-	-	-	-1	-36
Liability derivatives	-2,287	-	-	-	-	-26	-	-2,313
Short-term debt and collateral liabilities	-1,693	-	-	-	-107	123	-	-1,678
PPP payables	-2,599	-	-	63	-	-	-200	-2,736
<b>Assets</b>	<b>4,061</b>	<b>-</b>	<b>-</b>	<b>-63</b>	<b>1,133</b>	<b>-431</b>	<b>245</b>	<b>4,944</b>
Short-term investments and collateral assets	0	-	-	-	1,133	-	-	1,134
Asset derivatives	1,523	-	-	-	-	-431	-	1,092
PPP receivables	2,537	-	-	-63	-	-	245	2,719
<b>Total liabilities and assets relating to financing activities (1)</b>	<b>-48,112</b>	<b>-4,878</b>	<b>1,386</b>	<b>0</b>	<b>1,026</b>	<b>346</b>	<b>45</b>	<b>-50,188</b>
<b>Liabilities</b>	<b>-58</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>35</b>	<b>-</b>	<b>-</b>	<b>-23</b>
Overdrafts	-58	-	-	-	35	-	-	-23
<b>Assets</b>	<b>3,236</b>	<b>249</b>	<b>-0</b>	<b>-</b>	<b>96</b>	<b>-0</b>	<b>-0</b>	<b>3,580</b>
Loans, receivables and investments	6	249	-0	-	-	-	-0	255
Marketable securities	2,403	-	-	-	-172	-0	-	2,231
Cash at bank and in hand	827	-	-	-	268	-	-	1,095
<b>Total other financial liabilities and assets (2)</b>	<b>3,178</b>	<b>249</b>	<b>-0</b>	<b>-</b>	<b>131</b>	<b>-0</b>	<b>-0</b>	<b>3,557</b>
of which other financial assets	6	249	-0	-	-	-	-0	255
of which cash and cash equivalents	3,171	-	-	-	131	-0	-	3,303
<b>TOTAL NET DEBT (1)+(2)</b>	<b>-44,934</b>	<b>-4,629</b>	<b>1,386</b>	<b>0</b>	<b>1,157</b>	<b>345</b>	<b>45</b>	<b>-46,630</b>

Reconciliation between change in IFRS net debt and Free Cash Flow

In € millions	31/12/2016	Free cash flow	Non-cash changes	31/12/2017
Liabilities relating to financing activities	-52,172	-3,536	577	-55,132
Assets relating to financing activities	4,061	1,070	-186	4,944
Other financial assets	6	249	-0	255
Cash and cash equivalents	3,171	131	-0	3,303
<b>IFRS net debt</b>	<b>-44,934</b>	<b>-2,086</b>	<b>390</b>	<b>-46,630</b>
Of which operating cash flow		1,815 (1)		
Of which cash flow used in investing activities		-2,985 (2)		
Excluding changes in loans and advances granted *		249 (3)		
Of which interest paid		-1,165 (4)		
Excluding changes in the financial WCR of accrued interest receivable		29 (5)		
<b>Free cash flow</b>		<b>-2,057</b>	<b>(1)+(2)+(3)+(4)+(5)</b>	

\* Eole loans are considered as financial items within the meaning of net debt, whereas they are considered as investment flows within the meaning of the cash flow statement.



## 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 obligations

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 2018, this agreement covering wage increases and financial aid to buy back quarters from former apprentices resulted in the recognition of a provision for €5.6 million, stable compared to 31 December 2017.

#### 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	31/12/2018	31/12/2017
Pensions and other similar benefits	15	15
Provident obligations	18	17
Social welfare initiatives	98	98
Compensation for work-related injuries	468	482
<b>Liabilities relating to post-employment benefits</b>	<b>599</b>	<b>612</b>
Compensation for work-related injuries	15	15
Long-service awards and other benefits	41	40
Gradual cessation of activity	168	175
Time savings account	90	82
<b>Liabilities relating to other long-term benefits</b>	<b>314</b>	<b>311</b>
<b>Total liabilities</b>	<b>913</b>	<b>923</b>
- of which non-current	851	865
- of which current	61	58

### 6.2.2 Change in liabilities

In € millions	31/12/2018	31/12/2017
<b>Total liabilities at opening date</b>	<b>923</b>	<b>907</b>
Current service cost	70	59
Past service cost	-	-
Effect of plan settlements	-	-
Net financial interest	11	14
Actuarial gains and losses generated during the period	-27	18
Benefits paid to employees by the company	-64	-62
Changes in Group structure	-	0
Foreign exchange impact	-	-
Other	-	-12
<b>Total liabilities at closing date</b>	<b>913</b>	<b>923</b>

The net actuarial gain for the period mainly resulted from the increase in the discount and inflation rates which rose from 1.23% and 1.75% as at 31 December 2017 to 1.58% and 1.90% as at 31 December 2018, respectively.

Actuarial gains in respect of post-employment benefits were recorded in non-recyclable reserves for €9 million and actuarial gains in respect of long-term benefits were recorded in net finance cost for €18 million.

Changes in the present value of obligations, the fair value of plan assets and the net liabilities (assets) for 2018 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	31/12/2018
<b>Present value of the obligation at opening date</b>	15	17	98	497	257	40	923
Current service cost	2	0	2	17	35	13	70
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	6	3	0	11
Actuarial gains and losses generated during the period	-1	1	1	-11	-16	-1	-27
Benefits paid to employees by the company	-1	-1	-4	-27	-21	-11	-64
Effect of changes in Group structure	-	-	-	-	-	-	-
Foreign exchange impact	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
<b>Present value of the obligation at closing date</b>	15	18	98	483	257	41	913
Of which present value of unfunded obligations	15	18	98	483	257	41	913

Changes in the present value of obligations, the fair value of plan assets and the net liabilities (assets) for 2017 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	31/12/2017
<b>Present value of the obligation at opening date</b>	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	-0	-1	-4	-27	-23	-8	-62
Effect of changes in Group structure	0	-	-	-	-	-	0
Foreign exchange impact	-	-	-	-	-	-	-
Other	-0	-	-	-	-12	-1	-13
<b>Present value of the obligation at closing date</b>	15	17	98	497	257	40	923
Of which present value of unfunded obligations	15	17	98	497	257	40	923

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. The plan in question is the special pension scheme for employees with EPIC SNCF Réseau qualifying status since the creation of the SNCF employee pension and provident fund (Caisse autonome de Prévoyance et de Retraite du personnel de SNCF) in 2007.

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 2018 and 2017 breaks down as follows:

31/12/2018	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
In € millions							
Current service cost	2	0	2	17	35	13	70
Past service cost	-	-	-	-	-	-	-
Of which effect of plan amendments	-	-	-	-	-	-	-
Of which effect of plan curtailments	-	-	-	-	-	-	-
Effect of settlements on the obligation	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
<b>Gross profit</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>17</b>	<b>35</b>	<b>13</b>	<b>70</b>
Net financial interest	0	0	1	6	3	0	11
Actuarial gains and losses generated during the year with respect to long-term benefits	-	-	-	-0	-16	-1	-18
Other	-	-	-	-	-	-	-
<b>Finance cost</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>-13</b>	<b>-1</b>	<b>-7</b>
<b>Total</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>23</b>	<b>22</b>	<b>12</b>	<b>63</b>

31/12/2017 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	TOTAL
Current service cost	2	0	2	15	33	7	59
Past service cost	-	-	-	-	-	-	-
Of which effect of plan amendments	-	-	-	-	-	-	-
Of which effect of plan curtailments	-	-	-	-	-	-	-
Effect of settlements on the obligation	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
<b>Gross profit</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>15</b>	<b>33</b>	<b>7</b>	<b>59</b>
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	-5	0	-5
Other	-	-	-	-	-	-	-
<b>Finance cost</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>-1</b>	<b>1</b>	<b>9</b>
<b>Total</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>22</b>	<b>32</b>	<b>7</b>	<b>68</b>

### 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 2018 (€0.6 billion in 2017).

## 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 €5 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:

	31/12/2018	31/12/2017
Discount rate	1.58%	1.23%
Inflation rate	1.90%	1.75%
<b>Benefit remeasurement rate</b>		
Provident obligations	2.40%	2.40%
Social welfare initiatives	1.90%	1.75%
Compensation for work-related injuries	1.90%	1.75%
Gradual cessation of activity	2.37%	2.37%
Termination benefits and long-service awards	2.37%	2.37%
<b>Mortality table</b>		
	CPR M / CPR W	CPR M / CPR W
Mortality table	CPR WI	CPR WI
Provident obligations and social welfare initiatives	CPR W	CPR W
Active and retired employees with work-related injuries	CPR 80% M/ CPR 20% W	CPR 80% M/ CPR 20% W
Widows of employees with work-related injuries	CPR 80% M/ CPR 20% W	CPR 80% M/ CPR 20% W
Gradual cessation of activity		
<b>Gradual cessation of activity plan membership</b>	<b>31.89%</b>	<b>31.89%</b>

#### 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

The actuarial gains and losses arising from changes in financial assumptions mainly related to the increases in discount and inflation rates as at 31 December 2018. The actuarial gains and losses relating to experience adjustments resulted from the decrease in employee beneficiaries, the increase in certain expenses and the time savings account monetisations observed in 2018.

31/12/2018	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
<b>In € millions</b>									
<b>Opening actuarial gains (losses)</b>	<b>3</b>	<b>-1</b>	<b>-7</b>	<b>-37</b>	<b>-42</b>				
Experience adjustments relating to liabilities	0	-2	-5	-3	-9	0	9	1	9
Effects of changes in demographic assumptions relating to liabilities (1)	-	-	-	-	-	-	-3	-1	-4
Effects of changes in financial assumptions relating to liabilities	1	1	3	14	19	0	11	1	12
<b>Actuarial gains and losses on the obligation generated over the year</b>	<b>1</b>	<b>-1</b>	<b>-1</b>	<b>11</b>	<b>10</b>	<b>0</b>	<b>16</b>	<b>1</b>	<b>18</b>
Foreign exchange impact	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Closing actuarial gains (losses)</b>	<b>3</b>	<b>-2</b>	<b>-9</b>	<b>-26</b>	<b>-33</b>				
Total experience adjustments	0	-2	-5	-3	-9	0	9	1	9
Total impacts relating to changes in actuarial assumptions	1	1	3	14	19	0	8	0	8

31/12/2017	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
In € millions									
<b>Opening actuarial gains (losses)</b>	<b>1</b>	<b>1</b>	<b>-2</b>	<b>-19</b>	<b>-20</b>				
Experience adjustments relating to liabilities	2	-1	1	7	9	1	17	-0	17
Effects of changes in demographic assumptions relating to liabilities (1)	0	-	-	-	0	-	-	0	0
Effects of changes in financial assumptions relating to liabilities	-1	-1	-5	-25	-32	-0	-12	-0	-13
<b>Actuarial gains and losses on the obligation generated over the year</b>	<b>2</b>	<b>-2</b>	<b>-5</b>	<b>-18</b>	<b>-22</b>	<b>0</b>	<b>5</b>	<b>-0</b>	<b>5</b>
Foreign exchange impact	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
<b>Closing actuarial gains (losses)</b>	<b>3</b>	<b>-1</b>	<b>-7</b>	<b>-37</b>	<b>-42</b>				<b>-</b>
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

**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 2018

31/12/2018	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
In € millions							
<b>Actuarial (gains) losses</b>							
<b>Sensitivity to the discount rate</b>							
Change of + 0.25 pt		-4	-1	-4	-17	-7	-1 -33
Change of - 0.25 pt		0	1	4	18	8	1 31
<b>Sensitivity to the inflation rate</b>							
Change of + 0.25 pt		-	1	4	18	-	- 22
Change of - 0.25 pt		-	-1	-4	-17	-	- -21
<b>Sensitivity to Gradual cessation of activity membership rate</b>							
Change of + 1pt		-	-	-	-	5	- 5
Change of - 1pt		-	-	-	-	-5	- -5

31/12/2017	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
In € millions							
Actuarial (gains) losses							
<b>Sensitivity to the discount rate</b>							
Change of + 0.25 pt	-0	-1	-4	-18	-7	-1	-30
Change of - 0.25 pt	0	1	4	19	8	1	32
<b>Sensitivity to the inflation rate</b>							
Change of + 0.25 pt	-	1	4	19	-	-	23
Change of - 0.25 pt	-	-1	-4	-18	-	-	-22
<b>Sensitivity to Gradual cessation of activity membership rate</b>							
Change of + 1pt	-	-	-	-	6	-	6
Change of + 1pt	-	-	-	-	-6	-	-6



## 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. 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.

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". 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	31/12/2018	31/12/2017	Change
Rail network management fees, of which:			
Access fees	1,986	1,971	15
Reservation fees	2,053	2,079	-26
Traffic fees	1,236	1,378	-142
Platform fees	121	122	-1
Additional electrical traction usage and electricity transmission fees*	211	231	-20
Freight compensation	54	62	-8
Other fees	41	41	0
Maintenance services	323	614	-291
Other revenue	276	-2	278
<b>Total revenue by main service lines</b>	<b>6,301</b>	<b>6,496</b>	<b>-195</b>
Public sector customers (State and local authorities)	2,049	2,033	16
Private individual customers	3	-	3
Private and public sector railway company customers	4,249	4,463	-214
<b>Total revenue by type of customer</b>	<b>6,301</b>	<b>6,496</b>	<b>-195</b>
Immediate transfer	5,791	5,882	-91
Continuous transfer over short periods (less than one year)	510	539	-29
Continuous transfer over long periods (more than one year)	-	75	-75
<b>Total revenue according to the recognition method</b>	<b>6,301</b>	<b>6,496</b>	<b>-195</b>

Other revenue includes work, studies and materials invoiced for third parties, mainly within the PRG.

Performance obligations satisfied at a point in time (IFRS 15 section 38) are classified in the "Immediate transfer" category. This is the case for network usage and service facility fees (see below).

Performance obligations satisfied over time (IFRS 15 sections 35-37) are classified in the "Continuous transfer" over long or short periods depending on the forecast performance completion date. This is the case for leases.

#### Information on performance obligations adopted for the recognition of revenue

SNCF Réseau recognises the revenue generated by network usage fees at the time of the actual traffic.

Various incentive and compensation schemes impose penalties on SNCF Réseau or authorised rail companies and candidates in the event of malfunctions or a below-par service. These penalties or compensation reduce or increase revenue when their triggering event occurs.

Network usage leads rail companies to use different service facilities such as service stations, marshalling yards, sidings, freight yards or combined transport installations.

The revenue generated by these ancillary services is recognised as and when the service facility is used.

Lease revenue is collected continuously over the term of the lease. (IFRS 15 section 35 a)

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SNCF Réseau is also asked to perform studies and construction work. Revenue is therefore recognised on the percentage completion basis in accordance with IFRS 15 section 35 c, once

these specific services give rise to an enforceable right to payment for performance completed to date.

### 7.2 TABLE OF CHANGES IN CONTRACTUAL ASSETS AND LIABILITIES

In € millions	01/01/2018	Adjustment/ Capitalization	Decrease	Impairment	Changes in Group structure	Foreign exchange and other changes	31/12/2018
Sales invoice accruals - Revenue without an immediate right to invoicing (a)	4	-	-2	-	-	-0	2
Other contractual assets	-	-	-	-	-	-	-
<b>Contractual assets</b>	<b>4</b>	<b>-</b>	<b>-2</b>	<b>-</b>	<b>-</b>	<b>-0</b>	<b>2</b>
Payments received on account for customer contracts	8	7	-	-	-	-	16
Deferred income from customer contracts (b)	282	10	-28	-	-	155	418
Other contractual liabilities (c)	-	-	-	-	-	-	-
<b>Contractual liabilities</b>	<b>290</b>	<b>18</b>	<b>-28</b>	<b>-</b>	<b>-</b>	<b>155</b>	<b>434</b>

a: Concerns accrued income from sales invoice accruals relating to customer contracts: difference between revenue invoiced and revenue to be recognised according to the percentage completion of costs or the service provided.

b: Concerns deferred income relating to customer contracts on a percentage completion basis, deferred income relating to rail network management fees and deferred income relating to other customer contracts.

c: Concerns accrued credit notes relating to customer contracts with a variable consideration (e.g. contracts with the OA) and travel vouchers issued in the event of disruptions (Voyages, EIL, THI, etc.).

### 7.3 PURCHASES AND EXTERNAL CHARGES

Purchases and other external charges break down as follows:

In € millions	31/12/2018	31/12/2017	Change
Electricity transmission and traction means	-250	-253	4
Upkeep and maintenance	-583	-582	-1
Professional fees and IT services	-350	-322	-28
Property	-500	-482	-18
Other purchases and external charges	-445	-450	5
<b>Purchases and external charges</b>	<b>-2,127</b>	<b>-2,088</b>	<b>-39</b>

Other purchases and external charges declined by €17 million following the reclassification of incentive and compensation schemes as a deduction of revenue (Note 1.2.).

### 7.4 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 2018, the employee benefit expenses and headcount break down as follows:

In € millions	31/12/2018	31/12/2017	Change
Wages and salaries	-2,306	-2,302	-4
Other employee benefits	-6	2	-8
Seconded and temporary employees	-19	-16	-3
<b>Net employee benefit expense</b>	<b>-2,331</b>	<b>-2,315</b>	<b>-16</b>
<b>Average number of FTE employees</b>	<b>58,301</b>	<b>54,371</b>	<b>3,930</b>

**7.5 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	31/12/2018	31/12/2017	Change
Territorial Economic Contribution	-85	-86	1
Property taxes	-27	-26	-1
Salary-based taxes	-102	-84	-18
Of which apprenticeship tax	-12	-16	4
Of which vocational training	-21	-17	-4
Of which construction levy	-10	-10	0
Of which transport payment	-39	-35	-4
Of other taxes	-20	-6	-14
Other taxes and duties (including C3S)	-18	-14	-4
<b>Taxes and duties other than income</b>	<b>-231</b>	<b>-211</b>	<b>-20</b>

## 8 INCOME TAX EXPENSE

Income tax expense encompasses all taxes calculated on an accounting net profit or loss. The company value-added contribution is not considered as an income tax. Research and employment and competitiveness tax credits are deducted from the corresponding expenses.

The "Income tax expense" heading in the income statement includes:

- Corporate income tax and the various additional contributions associated with it.
- Sponsorship and foreign tax credits.
- Where applicable, the impact of tax reassessments in respect of income tax.
- Deferred tax

Since 1 January 2015, SNCF Réseau has belonged to the tax consolidation scope headed by EPIC SNCF. A tax consolidation agreement was signed by both entities to guarantee a neutral option for SNCF Réseau under this tax regime.

In accordance with IAS12, current and deferred taxes are recognised in the income statement for the period or directly in "Other comprehensive income" when they are generated by a transaction directly recorded in this heading. Deferred taxes are recorded on a specific line item in the consolidated statement of comprehensive income.

### Deferred tax

The Group recognises deferred tax on all temporary 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 taxes were measured at a rate ranging between 28.92% and 25.83% according to the year in which they will be settled.

Deferred tax assets in respect of temporary differences or tax losses carried forward, and tax credits, are recognised when recovery is deemed probable. SNCF Réseau limits the recognition of its deferred taxes to the projected amount of income tax that it expects to pay over a rolling 20-year period. This time period can be explained by SNCF Réseau's economic environment: sole control over management of the French national rail network, long business cycle (average asset depreciation period of more than 30 years) primarily based on 10-year performance contracts signed with the French State. Pursuant to IAS 12, deferred taxes are not discounted and are classified as non-current assets and liabilities in accordance with IAS 1.

### Current income tax

Income tax expense other than deferred tax corresponds to current tax provided for the period. It is offset against operating payables and receivables in the balance sheet.

### 8.1 INCOME TAX EXPENSE ANALYSIS

In € millions	31/12/2018	31/12/2017	Change
Current tax (expense)/income	-4	1	-5
Deferred tax (expense)/income	-767	-130	-637
<b>Total</b>	<b>-771</b>	<b>-129</b>	<b>-642</b>

### 8.2 TAX PROOF

The reconciliation between the theoretical tax expense (or income) and the expense (or income) actually recognised is presented in the following table:

In € millions	31/12/2018	31/12/2017
<b>Net profit/(loss) for the year</b>	<b>-4,784</b>	<b>-201</b>
Share of net profit/(loss) of companies consolidated under the equity method	0	1
Corporate income tax	-771	-129
<b>Net profit/(loss) before tax from ordinary activities and before the share of net profit of companies consolidated under the equity method</b>	<b>-4,014</b>	<b>-73</b>
Income tax rate applicable in France	34.43%	34.43%
<b>Theoretical income tax (expense)/income</b>	<b>1,382</b>	<b>25</b>
Permanent differences	-132	-120
Tax bases not utilised	-2,049	-73
Impacts of changes in tax rates - Liability method	-313	-403
Capitalisation of prior year losses	-	330
Impairment of previously capitalised deferred taxes	-1,507	-
Loss carryforwards generated and not capitalised	-229	-
Tax credits	32	38
Other	-4	-
<b>Corporate income tax</b>	<b>-771</b>	<b>-129</b>
<b>Effective tax rate</b>	<b>N/A</b>	<b>N/A</b>

### 8.3 DEFERRED TAX

SNCF Réseau calculated a net deferred tax asset receivable of €6.5 billion. Prior to the analysis of its recoverable portion, this amount comprised:

- loss carryforwards for €3.1 billion,
- timing differences for €3.3 billion,
- IFRS restatements for €0.08 billion.

The amount takes into account the decrease in the tax rate from 32.02% to 25.83% according to the year in which the various receivable components will be settled. The deferred tax asset receivable was recognised for €2.8 billion corresponding to the amount that can be recovered over the next 20 years, i.e. until 31/12/2038 inclusive for the receivable recorded as at 31/12/2018.

## 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	31/12/2018	31/12/2017
Operating receivables	768	712
Operating liabilities	882	782

\* Balance sheet headings excluding borrowings presented separately in balance sheet liabilities (see Note 5.2.2.)

#### Income and expenses

In € millions	31/12/2018	31/12/2017
Infrastructure fees	3,409	3,568
Operating expenses	-556	-565

#### 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	31/12/2018	31/12/2017
Operating receivables	57	80
Operating liabilities	90	62

#### Income and expenses

In € millions	31/12/2018	31/12/2017
Operating income	74	74
Operating expenses	-517	-503

### 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	31/12/2018	31/12/2017
Claimed grants to be collected	350	409

#### Income and expenses

In € millions	31/12/2018	31/12/2017
Access fees*	1,832	1,820
Freight compensation	54	62

\*of which TER fees: €1,392 million and TET fees: €440 million

### 9.3 COMPENSATION OF KEY EXECUTIVES

In € millions	31/12/2018	31/12/2017
Short-term employee benefits	4	3
Post-employment benefits	-	-
Termination benefits	-	-
<b>Compensation of key executives</b>	<b>4</b>	<b>3</b>

The stated amounts correspond to gross compensation. The change in the SNCF Réseau Executive Committee figures corresponds to the increase in the number of its members from 10.8 FTE in 2017 to 13.2 FTE in 2018.

The average gross salary of Executive Committee members rose by 0.52%.

## 10 OFF-BALANCE SHEET COMMITMENTS

Commitments given	31/12/2018					
	Change	Opening	Closing	Amount of commitments per period		
				< 1 year	1 to 5 years	> 5 years
<b>In € millions</b>						
<b>Commitments relating to financing</b>	-	-	-	-	-	-
<b>Commitments relating to operations</b>	150	1,350	1,500	279	368	853
Investment purchase commitments: other non-current assets	-14	70	56	29	27	-
Investment purchase commitments: EOLE project	-51	206	154	56	93	5
Sales undertakings - property	-14	58	44	37	7	-
Operating leases: equipment	6	44	51	31	20	0
Real estate operating leases	93	187	281	94	152	34
Financial guarantees given to third parties	0	760	760	0	3	758
Operating lease - rail equipment	129	25	154	31	67	56
<b>Total commitments given</b>	<b>150</b>	<b>1,350</b>	<b>1,500</b>	<b>279</b>	<b>368</b>	<b>853</b>

Commitments received	31/12/2018					
	Change	Opening	Closing	Amount of commitments per period		
				< 1 year	1 to 5 years	> 5 years
<b>In € millions</b>						
<b>Commitments relating to financing</b>	-	1,500	1,500	-	1,500	-
Unused bank credit line	-	1,500	1,500	-	1,500	-
<b>Commitments relating to operations</b>	<b>609</b>	<b>541</b>	<b>1,150</b>	<b>351</b>	<b>471</b>	<b>328</b>
Sales undertakings - property	-14	58	44	37	7	-
Real estate operating leases	543	2	545	65	184	296
Financial guarantees received from third parties	71	480	551	245	274	32
<b>Total commitments received</b>	<b>609</b>	<b>2,041</b>	<b>2,650</b>	<b>351</b>	<b>1,971</b>	<b>328</b>

## 10.1 SYNDICATED CREDIT FACILITY

SNCF Réseau has a syndicated credit facility that was set up on 29 June 2017 for €1,500 million (extendable to €2 billion) and expires on 29 June 2022.

It may be extended for 1 year and renewed twice. This credit facility was not drawn down as at 31 December 2018.

This undrawn credit facility was concluded with 15 banks. It is intended to strengthen SNCF Réseau's liquidity position and is an important factor for the assessment carried out by rating agencies on our credit quality.

## 10.2 ASSET PURCHASE COMMITMENTS

## 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.

The agreement approves the project's overall financing plan totalling €3.4 billion, of which €256 million in SNCF Réseau equity. The work carried out under SNCF Réseau project ownership amounts to €3 billion. Commissioning will take place between 2022 and 2024.

As decided by the French State, SNCF Réseau will guarantee a cash advance (repayable) capped at 40% of all the expenditure incurred at each stage, i.e. a maximum amount of €805 million. This advance, granted over a period of 10 years, will bear interest at 1.5%. The piggy-backing costs are paid by the French State and Société du Grand Paris (SGP).

## 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 project is currently being finalised. CDG Express was created on 5 October 2018. Its business becomes effective when the main contracts are signed, mainly the concession contract and the building design contract with SNCF Réseau. The signing that was initially scheduled in December 2018 took place on 11 February 2019.

**10.3 TRACK RESERVATION COMMITMENTS**

The Document de Référence du Réseau for 2018, 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.

**10.4 FINANCIAL GUARANTEES GIVEN TO THIRD PARTIES**

Financial guarantees given to third parties as at 31 December 2018 primarily comprised the guarantee issued in 2011 for the Caisse des Dépôts-Savings Account fund management.

**10.5 FINANCIAL GUARANTEES RECEIVED**

Financial guarantees received mainly comprise financial guarantees obtained from Eiffage Rail Express for €140 million, OCVIA for €122 million and VINCI Construction for €72 million.

Commitments received on property operating leases increased by €543 million as at 31 December 2018 following the retrieval of leases previously managed by agents.

Rolling stock lease commitments amounted to €154 million, including €134 million for Akiem and €16 million for Ermewa.

**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.

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:

In € millions	Ernst & Young		PwC	
	31/12/2018	31/12/2017	31/12/2018	31/12/2017
Statutory audit (consolidated and individual)	0.3	0.3	0.4	0.3
Services other than account certification	0.0	-	0.3	0.1
<b>Total</b>	<b>0.3</b>	<b>0.3</b>	<b>0.7</b>	<b>0.4</b>

# 04 – MANAGEMENT REPORT SNCF RÉSEAU FINANCIAL STATEMENTS

French accounting standards – In € millions





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## 1. SNCF RÉSEAU IN 2018

### 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 network and service infrastructures under transparent and non-discriminatory conditions: There are 27 railway companies running on the Network and 10 other companies, known as authorised candidates (combined transport operators, ports, etc.) that order train paths which they then assign to the rail company of their choice.

In July 2018, SNCF Réseau carried out a reorganisation, becoming more transversal and customer-focused. The reorganisation was structured according to major strategic tasks with **three Control Departments** (Strategy, Scheduling & Contracting Authority, Industrial & Engineering and System Operations), **three Production Departments** (Customers & Services, Operations & Production and Ile-de-France) and **four Support Departments** (Safety, Security & Risks, Human Resources, Finance & Purchasing and Communication & Regional Dialogue).

## SNCF RÉSEAU

### Three Control Departments

Building the French national rail network's strategy and defining technical policies and tools.

### Three Production Departments

Planning and realisation of industrial and operational projects.

### Four Support Departments

Facilitating the activity's coordination and management.

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.

construction and delivery of the rail link project between Paris-Est station and Paris-Charles-de-Gaulle Airport.

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;
- Altametriz, a company specialising in the collection, processing and optimisation of data using automated mobile devices, 100% owned by SNCF Réseau.
- SNCF INFRA LBA DEVELOPPEMENT, a holding company 40% owned by SNCF Réseau and 60% owned by Le Bronze Alloys. It holds 5% of the joint venture XI'AN RAILWAYS TECHNOLOGY PARTNERS, which produces catenary parts for the Chinese market;
- LINEA FIGUERAS PERPIGNAN, a company equally owned by SNCF Réseau and ADIF, whose purpose is to carry out traffic and maintenance operations for the rail link between Figueras in Spain and Perpignan in France;
- IMMO RESEAU, a real estate holding company founded in April 2018 and 100% owned by SNCF Réseau, whose primary purpose is to invest in companies dedicated to property development and promotion, in order to assist in the valuation process. Along with SNCF Mobilités, it holds 50% of EFAC (Espaces Ferroviaires Aménagement Commun) and EFPC (Espaces Ferroviaires Promotion Commun);
- CDG Express Travaux, a company founded on 5 October 2018 and equally held by SNCF Réseau, the ADP Group and the Caisse des Dépôts et Consignations (CDC). It follows on the CDG Express Etudes subsidiary and will be awarded a works concession agreement from the French State that will cover project ownership, financing, design,

### 1.2. CORPORATE STRATEGY

#### 1.2.1. New railway pact

The law for a new railway pact was published in the *Journal Officiel* on 28 June 2018. In authorising the government to legislate by decree, this law defines a new rail transport model in a market open to competition, while preserving the mandates of an efficient public service.

The new railway pact is based on several priorities:

- **change in legal status:** as of 1 January 2020, SNCF Réseau will become a public limited company with non-transferable capital, wholly owned by SNCF, a holding company in the form of a national publicly funded company, whose capital is also non-transferable;
- **enhanced performance of the new SNCF** by improving its industrial efficiency and cutting costs;
- **new trajectory in terms of investments**, including an additional €200 million yearly as from 2022 included in an amendment to the performance agreement;
- **change in status of railway employees** intended to end railway employee status in recruitment as of 1 January 2020 and forge a new and attractive company agreement;
- **successful opening to competition** for the infrastructure manager which will develop a number of French national rail network companies and change the relationship with the Transport Organising Authorities which depend on network data;
- **strengthening of the infrastructure manager** with the transfer of Gares & Connexions to SNCF Réseau, via a subsidiary.

In addition, on May 25, 2018, the French Prime Minister announced that the French State would absorb €35 billion in SNCF Réseau debt, of which €25 billion in January 2020, and €10 billion in 2022.

### 1.2.2. Transformation of SNCF Réseau: Nouvel'R project

The Nouvel'R corporate plan is part of the railway pact and sets out a 2030 strategy for SNCF Réseau: maximize infrastructure use by circulating more trains on the existing network, particularly for the major hubs and lines. Launched by Patrick Jeantet in September 2017 and implemented in July 2018, the plan is based on three identity pillars:

- a new **EXTENT**: Re-appropriate the regions;
- a new **ATMOSPHERE**: in step with new mobility uses and needs;
- a new **ERA**: re-establish rail transport as a vital player in societal change.

The project consists in **formulating a 2030 strategic plan** based on six focal points:

- modernise the network with the greatest traffic as a priority;
- boost the capacity and solidity of saturated or potentially saturated lines and hubs
- speed up the modernisation of operating and signalling systems;
- roll out a commercial policy that promotes the use of the rail network;
- continue to ensure safety and strengthen security;
- assist the company's employees with these new challenges.

### 1.2.3. Golden rule

The "Golden rule" ratio specifies the financing rules for SNCF Réseau investments and is defined as the ratio of net debt (period-end repayment amount) to IFRS gross profit for the period.

The provisions of Law no. 2018-515 of 27 June 2018 for a new railway pact, and Order no. 2018-1135 of 12 December 2018 amended Article L. 2111-10-1 of the French Transport Code, specifying the financing rules applicable to SNCF Réseau investments.

These new provisions give rise to two investment categories: development and renewal (modernisation now representing a development operation – even though the laws provide for specificities).

When analysed, the provisions identify three stages in the enactment of the new rules governing the financing terms of SNCF Réseau investments.

#### Until 1 January 2020:

The prior provisions will continue to apply. The debt / gross profit ratio is capped at 18. Maintenance investments are governed by the multi-year contract and specifically appendix 7.

As at 31 December 2018, the ratio stood at 31.06. It has risen under the combined effects of the increase in the net debt

repayment amount €(2,736) million and the decline in gross profit €(344) million.

#### From 1 January 2020 to 31 December 2026:

The articles of association of the new national public limited company, to be approved before 31 December 2019, will set the convergence terms so that the ratio (debt to gross profit, defined based on the SNCF Réseau statutory scope) reaches the cap set in the articles of association no later than 31 December 2026. In addition, as long as the ratio has not attained the cap, the financing rules for SNCF Réseau investments must comply with the following principles:

- no financial investment for development projects unless they involve modernisation;
- for renewal or modernisation projects, the investment level will be determined by SNCF Réseau so that the return on the investment is at least equal to the weighted average cost of capital of SNCF Réseau for this same investment after consideration of the risks specific to the investment.

This cap is likely to be lowered when the French State absorbs a portion of the SNCF Réseau debt.

Should the ratio attain the cap before the set deadline, the post 1 January 2027 plan could be applied in advance.

#### As of 1 January 2027:

The rules governing the financing terms of SNCF Réseau investments will be established to control the debt, in compliance with the cap and based on the following principles:

- the investments supported by SNCF Réseau should not exceed the cap;
- for any renewal or development investment project for the French national rail network requested by the French State, regional authorities, or any other third party, SNCF Réseau will determine its contribution to the project's financing so that the return on the investment is at least equal to the weighted average cost of capital of SNCF Réseau for this same investment after consideration of the risks specific to the investment.

The terms and conditions governing the application of this law will be specified by Decree.

## 1.3. MAJOR EVENTS

### 1.3.1. First half strike

The first half of 2018 was marked by a major strike, in opposition to the planned reform of the rail system. The strike extended from 22 March 2018 to 7 July 2018, with two days of strike action every five days, for a total of 39 strike days.

The strike had significant impacts for SNCF Réseau, mainly due to the drop in traffic that decreased infrastructure fees. Production was also disrupted at various levels due to the disarray of several projects.

### 1.3.2. Reclassification of SNCF Réseau as a public administration (APU) as of 2016

In a press release published on 6 September 2018, and in agreement with Eurostat, the INSEE announced the reclassification of SNCF Réseau as a public administration (APU) as of 2016 for the October 2018 notification. This reclassification had an automatic impact on the deficit and public debt notified for fiscal years 2016 and 2017. The annual deficit of SNCF Réseau is now being monitored by the INSEE.

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In 1997, Eurostat had endorsed the INSEE decision to classify RFF outside of the APU scope since its merchant revenues, essentially comprising infrastructure fees paid by SNCF, covered more than 50% of its production costs.

Since then, the comparative dynamics of the merchant revenues and the production costs of RFF and subsequently SNCF Réseau have led to a gradual decrease in the share of production costs covered by merchant revenues, in particular due to the company's growing debt and the major investments undertaken to renew the network or create new high-speed lines over the last decade.

### 1.3.3. Professional elections

From 16 to 22 November 2018, the PRG employees elected members of the Labour and Economic Committees, the new employee representative bodies whose four-year mandate began on 1 January 2019.

These new bodies replace the former Works Committees, the Health, Safety and Working Conditions Committees, and the Personnel Delegations.

### 1.3.4. Audit of the French Anti-corruption Agency

The French Anti-corruption Agency (AFA) was created in December 2016. Pursuant to the announcements made on its creation, the Agency audited several State companies.

To this end, EPIC SNCF Réseau was audited by the AFA in February 2018. To measure the general anti-corruption organisation, 160 checkpoints were targeted, including whistle-blowing procedures, customer and supplier evaluations and accounting processes.

Since the month of June, some 50 persons have been interviewed by the AFA, including the Chairman and the Director of Human Resources.

SNCF Réseau is awaiting the audit's conclusions.

### 1.3.5. Audit of the AMF - French Financial Markets Authority

The financial reporting of SNCF Réseau was audited by the Autorité des Marchés Financiers (AMF) with respect to the financial statements for the periods ended 31 December 2017 and 30 June 2018. The questions mainly covered the impairment test, the recognition of Public-Private-Partnerships (PPP) and concessions, the nature and classification of financial instruments, and the implementation of the new IFRS 9, 15 and 16 standards. They occasionally led SNCF Réseau to make some minor adjustments to its financial statements.

### 1.3.6. Subsequent events

#### ARAFER opinion

ARAFER's opinion on fee pricing for the 2020 service timetable for regulated activities was not considered as an indication of impairment.

#### CDG Express

The decree approving the concession agreement for the CDG Express, a high-speed train linking Paris to Roissy airport in twenty minutes as from 2024 was published in the *Journal Officiel* on 16 February 2019.

On 11 February 2019, the French Transport Ministry announced the signing of the agreement with the infrastructure manager, a company equally held by ADP, SNCF Réseau and the Caisse des Dépôts.

## 1.4. FINANCIAL KEY FIGURES

In € millions

2018

2017

Revenue	6,233	6,466
Gross profit	1,480	1,748
Operating profit/(loss)	517	957
Finance cost	-1,484	-1,426
Net profit/(loss) from ordinary activities before tax	-967	-469
Exceptional profit/(loss)	-3,341	68

### 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 €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 represented an indication of impairment for Infrastructure CGU assets. The new test carried out did not give rise to the recognition of an impairment change.

As at 30/06/2018, the adoption on 14 June 2018 of the authorisation law for a new railway pact and the various announcements by the French government, particularly regarding the change in SNCF Réseau infrastructure fee terms and conditions represented new indications of impairment. A new test was therefore carried out using available information taken from:

- the reference framework for the PRG economic and financial trajectory and its roll-out for SNCF Réseau that was presented for information purposes to the Board of Directors on 25 July 2018,
- exchanges with the French State that led to the definition of the trajectory's structural components as mentioned below.

This test gave rise to the recognition of additional impairment of €3.4 billion, the network's recoverable amount totalling €30.1 billion, of which 93% represented by the terminal value, for a reference net carrying amount of €33.5 billion as at 30/06/2018. It should be noted that the 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.

As part of the 31/12/2018 closing, SNCF Réseau did not identify any new indications of impairment for its infrastructure assets and did not therefore conduct any impairment tests.

It should be noted that ARAFER's opinion of 7 February 2019 on the fee pricing for the 2020 service timetable for SNCF

Réseau regulated activities was not considered as an indication of impairment insofar as it should not apply to the years after 2020.

The French State notified SNCF Réseau of a draft order, pursuant to Article 33 of the Law of 27 June 2018 for a new railway pact, that will introduce, within Article 2133-5 of the French Transport Code, the fact that the infrastructure fees of regulated activities will be deemed as sustainable once there is a public service agreement guaranteeing the economic balance for the railway companies in the relevant market segments, while ensuring that the overall fee amount payable by a regulated transport activity does not exceed the share of the full cost of managing the network attributable to such activity. This draft order is currently being consulted at ARAFER and the Conseil d'Etat. It will be published by no later than 31 March 2019, the date on which the authorisation granted to the French Government by the French Parliament to adopt measures regarding this matter by enacting orders expires.

It should be noted that the net carrying amount of Infrastructure CGU assets was €31.0 billion as at 31 December 2018, compared with €32.8 billion as at 31 December 2017, after impairment recognised in previous years. These assets cover service lines and ongoing renewal work.

Other assets under construction (€1.8 billion as at 31 December 2018, compared to €0.9 billion as at 31 December 2017) involve capacity investments under development, whose value is analysed separately as part of a specific review.

The methodological items used to determine the recoverable amount as at 30/06/2018 as well as the various key assumptions are shown below:

The methodology adopted was identical to that applied during the previous impairment test.

It should be noted that the discounted forecast cash flows are calculated over the ten-year business trajectory from the 2017-2026 performance contract with the French State updated for new available information and extended until 2030, which continues to represent a normative year, as the network will therefore be considered as stabilised at that date with a sufficient level of performance or renewal to optimise the amount of maintenance. 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% with no change compared to the rate used for the test carried out on 31 December 2017.

The key test assumptions involved the levels of infrastructure fees, investments, productivity as well as government loans.

These assumptions were updated to take into account the agreements signed between the company and the French State resulting from the new economic and financial trajectory regarding:

- Changes in infrastructure indexation: limitation on the increase in TGV and freight infrastructure fees at the IPC index (1.75%) replacing the indexation set out in the previous performance contract and at the same time maintenance of the indexed pricing for regulated infrastructure fees, i.e. TER and TET access fees, pursuant to the initial performance contract and applicable regulations,

- With regard to freight pricing, maintenance by the French State of the offsetting mechanism, whose amount was raised to take into account the changes in indexation and the transition to the directly attributable cost model in connection with the 2019 pricing,
- Additional investments scheduled as from 2020 for around €200 million per year (at constant 2016 euros). These investments will confirm the quality of the renewed network in 2030,
- A gradual increase in financing for safety and accessibility expenses (outside the Greater Paris region) to achieve full financing as from 2024,
- Additional future productivity work for current €300 million until 2026 as well as the current €1.2 billion for productivity already recorded in the performance contract,
- The payment of investment grants by the French State on behalf of SNCF Réseau allocated to the financing of renewal investments for amounts revised upwards compared to the performance contract to achieve annual amounts of €988 million. These grants resulted from the French State's allocation of all or part of the dividends collected by SNCF from SNCF Mobilités' P&L, in addition to the transfer of a share of the Public Rail Group's tax consolidation income. The renewal investment grant amounts taken into account are based on the PRG's economic and financial trajectory as part of the Group's current tax and legal organisation that was also presented to the Supervisory Board on 27 July for information purposes.

The 10-year traffic forecasts for SNCF Mobilités were drawn up in connection with the Public Rail Group and are consistent with those of SNCF Mobilités.

The results of the sensitivity analyses carried out for the 30/06/2018 test were as follows:

Sensitivity to the valuation parameters:

A change of +/- 10 basis points in the discount rate represents a change of +/- €1.2 billion in the recoverable amount.

A change of +/- 10 basis points in the perpetual growth rate results in a change of +€0.8 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 +/- €2.0 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.

## 2. 2018 RESULTS

### 2.1. GENERAL OBSERVATIONS ON 2018 GROUP RESULTS

In € millions	31/12/2018	31/12/2017	Change In € millions
Revenue	6,233	6,466	-232
Own production and change in inventories and WIP	4,738	4,429	309
Purchases and external charges	-5,924	-5,492	-432
<b>Added value</b>	<b>5,047</b>	<b>5,402</b>	<b>25</b>
Other operating income (including operating grants)	201	148	52
Taxes and duties other than income tax	-234	-214	-45
Employee benefit expense	-3,533	-3,588	55
<b>Gross profit</b>	<b>1,480</b>	<b>1,748</b>	<b>-269</b>
Reversal of impairment, operating provisions and investment grants; Expense reclassifications	1,316	1,134	181
Depreciation, amortisation, impairment and operating provisions	-2,278	-1,925	-353
Other management expenses	0	-1	1
<b>Operating profit/(loss)</b>	<b>517</b>	<b>957</b>	<b>-440</b>
Financial income	879	578	301
Financial expenses	-2,363	-2,004	-359
<b>Finance cost</b>	<b>-1,484</b>	<b>-1,426</b>	<b>70</b>
<b>Net profit/(loss) from ordinary activities before tax</b>	<b>-967</b>	<b>-469</b>	<b>-498</b>
Exceptional income	500	464	37
Exceptional expenses	-3,841	-396	-3,445
<b>Exceptional profit/(loss)</b>	<b>-3,341</b>	<b>68</b>	<b>-3,409</b>
Corporate income tax	86	106	-19
<b>Net profit/(loss) for the year</b>	<b>-4,221</b>	<b>-295</b>	<b>-3,926</b>

**2.1.1. Revenue**

	31 December 2018	31 December 2017	Change during the year
Access fees	1,986	1,971	15
Reservation fees	2,053	2,078	-25
Traffic fees	1,236	1,378	-142
Platform fees	121	122	-1
Additional electrical traction fees	211	231	-20
Other proceeds	41	41	0
<b>Sub-total infrastructure sale proceeds</b>	<b>5,648</b>	<b>5,820</b>	<b>-172</b>
Other income	585	645	-60
<b>Total revenue</b>	<b>6,233</b>	<b>6,466</b>	<b>-232</b>

Revenue dropped by €(232) million compared to the end of December 2017, of which €(213) million following the H1 2018 strike that was also impacted by other exceptional items for €(29) million: the decrease in electricity re-invoicing and the resolution of litigation previously provided for with railway companies.

**2.1.2. Own production**

	31 December 2018	31 December 2017	Change during the year
Own production - Purchases and external charges	3,519	3,166	353
Own production - Employee benefit expense	1,138	1,177	-40
Change in inventories and work-in-progress	81	85	-4
<b>Total Own production</b>	<b>4,738</b>	<b>4,429</b>	<b>309</b>

**2.1.3. Other operating income**

	31 December 2018	31 December 2017	Change during the year
Operating grants	138	132	5
Other income	36	16	20
<b>Total Other operating income</b>	<b>174</b>	<b>148</b>	<b>26</b>

**2.1.4. Purchases and external charges**

	31 December 2018	31 December 2017	Change during the year
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**3. INVESTMENTS**

In € millions	2018	2017	Change	
			In € millions	As a %
Major development projects	762	1,212	-450	-37%
Of which PPP share	111	675	-564	-84%
Regional development projects	869	818	50	6%
Network compliance upgrade	268	246	22	9%
Renewal and performance	2,725	2,668	56	2%
Real estate and other	133	129	4	3%

Transmission and traction means	-322	-281	-41
Upkeep and maintenance	-2,391	-2,236	-155
Professional fees and IT services	-774	-706	-68
Property	-775	-742	-33
Other purchases and external charges	-1,664	-1,528	-135
<b>Total</b>	<b>-5,924</b>	<b>-5,492</b>	<b>-432</b>

**2.1.5. Employee benefit expense**

	31 December 2018	31 December 2017	Change during the year
Wages and salaries	-2,347	-2,315	-32
Pension contributions	-641	-664	23
Other social security contributions	-474	-507	34
Expenses relating to vacation, leave and early departures	-7	-31	23
<b>Sub-total</b>	<b>-3,468</b>	<b>-3,516</b>	<b>48</b>
Seconded personnel	-65	-72	7
<b>Total employee benefit expense</b>	<b>-3,533</b>	<b>-3,588</b>	<b>55</b>
<b>Total average number of paid employees</b>	<b>57,439</b>	<b>57,692</b>	<b>-253</b>

The average number of salaried employees as at 31/12/2018 was 57,439.

**2.1.6. Finance cost**

	31 December 2018	31 December 2017	Change during the year
Net borrowing costs	-1,498	-1,480	-18
Net finance cost of employee benefits	16	-31	48
Dividends	1	0	1
Other financial expenses	-207	-27	-180
Other financial income	204	113	91
<b>Total finance cost</b>	<b>-1,484</b>	<b>-1,426</b>	<b>-58</b>

**2.1.7. Exceptional profit/(loss)**

The 2018 net exceptional loss of €(3,341) million primarily comprised asset impairment losses in the amount of €(3.4) million.

<b>TOTAL RAIL INVESTMENTS</b>	<b>4,758</b>	<b>5,075</b>	<b>-317</b>	<b>-6%</b>
Industrial	299	303	-4	-1%
<b>TOTAL EXPENDITURE</b>	<b>5,057</b>	<b>5,378</b>	<b>-321</b>	<b>-6%</b>

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

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Total investment expenditure represented €5,057 million, down by €321 million compared to 2017 (€5,378 million). Excluding expenditure for major projects under Public-Private-Partnerships (PPP) for €(564) million, investment expenditure was up overall by +€243 million, in particular due to the major development project involving the RER EOLE extension in Ile de France for +€117 million, the increase in regional development projects for +€50 million, and the +€56 million primary network renewal effort to upgrade rail infrastructures.

Rail infrastructure modernisation is continuing at a steady pace under the renewal effort, which has been confirmed by the proposed new railway pact law.

### - *Renewal and performance investments*

The 2018 renewal programme demonstrates the company's determination to continue investing to upgrade the primary network with the greatest traffic volume.

Production stood at €2,725 million in 2018, for a +2% increase (+€56 million) over 2017.

The renovation of track and points and crossings for the primary network (Vigirail plan) remained intense, in line with the scheduled work. Track renewal investments amounted to €1,681million, up +3% compared to 2017, with Ile-de-France accounting for 25% of the investments. Signalling investments and electric traction also increased compared to 2017, rising by +2% and +13%, respectively.

### - *Network compliance upgrade*

Network compliance upgrade falls within the priority given by the company to specific safety and accessibility operations and compliance work. Production in 2018 was up year-on-year, particularly for the Safety and Accessibility activity.

### - *Network development*

Network development investments include investments in major national and regional projects.

Network investment and development expenses decreased by €(400) million compared to 2017, primarily due to the end of major projects under PPPs resulting in a €(564) million decrease, offset by work on the RER EOLE and other regional projects.

### - *Major projects under PPPs*

In 2018, production arising from projects under PPPs totalled €111 million and mainly concerned the finalisation of related work carried out under SNCF Réseau project ownership and the completion of the Gare de Montpellier-Sud-de-France.

As a reminder, the LGV Sud Europe Atlantique SEA and LGV Bretagne - Pays de la Loire BPL projects were commissioned on 2 July 2017.

### - *Major pre-work projects*

The studies relating to future major projects will be ranked in order of importance based on the new mobility law following the report of the Infrastructure Guidance Board. The decisions made by the French State will determine the launch and progress of these real estate studies/acquisitions.

### - *Major projects in progress*

Expenditure for major projects in progress stood at €616 million in 2018. This category mainly comprises the Eole project for €586 million.

### - *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 2018 and 2019. Total expenditure stood at €869 million in 2018.

## 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, closing rate remeasurement and loans to consolidated subsidiaries and loans to external third parties and advances) totalled €48.2 billion, compared to €45.5 billion as at 31 December 2017, i.e. an increase of €2.7 billion, comprising:

- Long-term resources raised by SNCF on government bond markets in 2018 which represented a total repayment amount of €2.1 billion;
- Bond repayments in euros and Swiss francs for €1.2 billion;
- Increase in short-term debt less cash and cash equivalents for €1.8 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 2018	31 December 2017	Change during the year
<b>Long-term debt</b>	<b>47,447</b>	<b>46,242</b>	<b>1,205</b>
Outstanding principal:	46,761	45,591	1,170
<i>Long-term</i>	46,275	45,121	1,154
<i>RIF loans</i>	30	34	-3
<i>Zero coupon</i>	455	436	20
Accrued interest:	686	652	35
<b>SNCF debt</b>	<b>686</b>	<b>691</b>	<b>-5</b>
Outstanding principal:	665	670	-5
<i>Transferred debt (historical price)</i>	662	666	-4
<i>RIF loans</i>	3	4	-1
Accrued interest	21	21	0
<b>Guarantee deposits received</b>	<b>5</b>	<b>5</b>	<b>0</b>
<b>Short-term debt</b>	<b>2,863</b>	<b>1,620</b>	<b>1,243</b>
<b>Margin calls (Liabilities)</b>	<b>91</b>	<b>64</b>	<b>26</b>
<b>Bank overdrafts</b>	<b>20</b>	<b>23</b>	<b>-3</b>
<b>PPP payable</b>	<b>2,289</b>	<b>2,221</b>	<b>69</b>
<b>Total borrowings</b>	<b>53,402</b>	<b>50,866</b>	<b>2,536</b>
Cash and equivalents and investments	-2,792	-3,367	574
- PPP receivable	-2,274	-2,227	-47
- Collateral (Assets)	-1,120	-1,084	-36
- Guarantee deposits received	-6	-6	-0
- Loans to external third parties	-479	-249	-230
- Advances and loans to consolidated subsidiaries	-17	-16	-1
- Remeasurement difference - Foreign exchange hedging impact	872	1,086	-214
- Remeasurement difference - Inflation-indexation hedging impact	-144	-113	-31
Net debt as a carrying amount	47,442	44,891	2,551
- Accrued interest receivable	-708	-673	-35
- Loans to external third parties	479	249	230
- Advances and loans to consolidated subsidiaries	17	16	1
- Net guarantee deposits	1	1	-0
- Net collateral	1,029	1,019	10
- PPP net debt	-15	6	-22
Net debt repayment amount	48,245	45,510	2,736

## 04 – Management report on the statutory financial statements

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.

The Financing and Treasury Department's 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.

Compliance with the authorised threshold by counterparty is monitored on a daily basis by the Financing and Treasury Department's Middle Office/Control.

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 €90.6 million at 31 December 2018, compared to €64.3 million at the end of 2017.

## 5. COMPANY ECONOMIC ACTIVITY

### 5.1. CLIENT SATISFACTION: IMPROVE NETWORK ACCESS

#### - Quality systems

The service quality approach is accompanied by the setting of objectives and the measurement of the degree of client satisfaction. The results of the 2018 survey were shared with all clients during the meeting held on 17 October in Paris.

Our clients (freight and passenger companies, shippers, and Combined Transport Organising Authorities) are satisfied with the exchanges and appreciate the relationship with their SNCF Réseau counterparts and their commitment, as well as the quality of the business dialogue. They insist on SNCF Réseau's major role in maintaining and supporting the competitiveness and appeal of rail transport.

In this context, our clients have nevertheless suggested areas of improvement for SNCF Réseau, essentially involving three points:

- the deadline for an alternative adapted response should it be impossible to respond to the first request;
- a firm response as soon as possible for a train path request;
- schedule stability.

Existing incentives for both the infrastructure manager and train path applicants were renewed in 2018:

- the **reciprocal incentive scheme**, established in 2015, sanctions railway companies 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.
- the **Performance Improvement System**, an incentive measure that sanctions the infrastructure manager (IM) and/or railway companies responsible for irregularities resulting in traffic delays (penalties are based on the number of minutes lost per 100 km);

INDICATORS	2018	2017	2016
Number of minutes lost per 100 km by RC:			
- for IM reasons (min)*	1.46	1.34	1.38
- for RC reasons (min)*	2.13	2.12	2.10
Capital expenditure to improve reliability (€ million)	29	36	44

- 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. A clear improvement in 2018, the efforts made to respond more rapidly to customers being the main reason.

INDICATORS	2018	2017	2016
Traffic in train.km (M T.km)	441	476	470.8
Freight traffic from railway companies other than Fret SNCF (%)	54	52	49
Passengers traffic from railway companies* other than SNCF (%)	5.0	4.8	5.2

Satisfaction rating for railway undertaking customers (out of 10)**	na	5.5	na
Generic window consumption rate (%)	91.3	88.8	84.9

\*Including the Thalys and Eurostar subsidiaries

\*\*Biennial satisfaction survey

#### - A new catalogue of service offerings adapted to new types of customers

SNCF Réseau is rolling out a new "major accounts" approach for both current customers and the future customers expected as part of the opening of the Passenger market.

With the opening of the Passenger market, SNCF Réseau and SNCF Mobilités are anticipating new types of clients (investor clients, mobility companies wishing to develop rail operations, rail companies operating in Europe or already managing passenger transport services in foreign countries, etc.).

The work covering the new service offering, new processes, and the new Client relationship falls under the Nouvel'R corporate plan.

To develop the regional rail offering and anticipate new mobility needs, SNCF Réseau is seizing the opportunity afforded by the opening of the regional line market by supporting both the regions as of 2019 (tender bids for the regional market will be mandatory beginning in 2023) and the transport companies who will have access to the high-speed lines beginning with the 2021 annual service agreement under OPEN ACCESS.

Three newly created service offerings will be marketed in 2019:

- Data and IS;
- Studies and Consulting;
- Training.

To accompany the Document de Référence du Réseau, which remains the benchmark regulatory document, the broad principles of a service catalogue were presented to clients during the annual meeting organised in October 2018.

#### - New website [www.sncf-reseau.com](http://www.sncf-reseau.com)

In November 2018, SNCF Réseau launched a new website designed to provide information to networks clients. Users can discover all the services offered by the infrastructure manager.

#### - Supporting the regions in the opening of the passenger market to competition

Beginning in early 2018, SNCF Réseau, which has assembled a project team tasked with preparing the passenger market's opening, has assisted the regions with various issues that fall within the infrastructure manager's competence:

- the sharing of key milestones regarding calls for tender procedures, with a description of the role and support offered by SNCF Réseau for each major stage;
- support for allotment projects, with the contribution of factual components to operational reasoning in order to clarify regional decision-making, with regard to the level of strength sought;
- the presentation of essential data to support the mobility strategy's definition and/or of a call for tenders' preparation;

- proposal of a cooperation agreement dedicated to the preparation for competition.

SNCF Réseau has determined that it will meet with all the regions regarding the opening of the passenger market to competition by the end of 2019.

INDICATORS	2018	2017	2016
Number of transport organising authorities (TOA) (regions and the French State) met at least once during the year from among the 13 TOAs in mainland France	7	-	-

### - Accessibility for persons with reduced mobility

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 €130 million for more than 40 million train departures, i.e. an average of €3.2 per train departure.

Under Order 2014-1090 of 26 September 2014, SNCF Réseau must contribute to a National Accessibility Master Plan under the Programmed Accessibility Agenda and Regional Accessibility Master Plans.

As a priority, 720 stopping points (stations and stops) will be made accessible to persons with reduced mobility.

These accessibility agendas are planned until 2025 for an estimated budget of just over €2.8 billion.

INDICATORS	2018	2017	2016
Number of stopping points for which accessibility work has been completed at the national level	29	34	44
Capital expenditure to improve accessibility (€ million)	171	142	132

### 5.2. NETWORK OPERATIONS: SAFETY AND RELIABILITY CHALLENGES

#### - Safety

Changes to safety management and the risk-based approach initiated by the PRISME, H:00 and FIRST programmes continued in 2018. Overall, the fundamental safety, production quality and passenger information targets were met in 2018, with a drop in SSIs managed by SNCF Réseau in 2018.

SNCF Réseau's goal is to continue lowering SSIs and work accident frequency. The PRG seeks to reduce by half the annual rate of accidents with work stoppage between 31 December 2015 and 31 December 2020. To this end, an OHS managerial transformation (Dupont de Nemours approach) was launched in the production zone establishments.

Interventions will be further secured in 2019 via the use of digital tools, and work site safety will be reinforced through a renewed and effective partnership with external service providers

#### - Punctuality

Fiscal 2018 was heavily marked by the April-June strike and the extent of bad weather. With about 100,000 fewer trains in circulation during each month of the strike, there is little comparison between the 31 December 2018 results and those of the previous year.

The number of minutes lost and the number of incidents behind this lost time are down by 10% and 4%, respectively, compared to 2017.

Despite these phenomena, when observing a longer period, the sources of irregularity are relatively stable, suggesting the necessity of acting on the fundamentals.

In 2019, the management of regularity will be reinforced by improving areas deemed to be sensitive. This will be accomplished by pursuing the following strategies:

- maintaining or reducing the irregularity rate overall and for the network share;
- Improving the traceability of cancelled trains and the quality of input regarding incidents that impact regularity;
- improving punctuality to 0 min on departure (H:00programme);
- improving the understanding of signalling failure modes and their causes so as to better eliminate those with the greatest impact on service;
- reduce the impacts of catenary incidents;
- decrease the number of regularity incidents due to seasonal events (adhesion, extreme cold or heat) or wildlife;
- improving work shift reliability and anticipating the restoration of capacity.

### 5.3. NETWORK MAINTENANCE: SAFETY AND INNOVATION

Production in 2018 was heavily impacted by the adverse weather in the early year, followed by the consequences of the strike. Despite efforts to adapt, production was down compared to 2017. This lag, which concerns reprogrammable operations, has only been partially offset, particularly in regard to periodic catenary overhauls.

The renewal rate for aging infrastructures remains high despite the significant constraints mentioned above. Major efforts have been made to replace switches and crossings, initiated by the Vigirail programme, even though they fell below the 2017 level. Maintenance should be almost 98% completed all specialisations combined.

The "tightened" maintenance measures introduced in 2016 have been expanded to cover a larger operating scope. These reinforced maintenance operations put into action the feedback and recommendation relating to the Brétigny-sur-Orge, Denguin and Carbonne accidents among others. The goal is to accelerate the rate of replacement of certain obsolete components and ensure that the just-in-time principle is respected when failures are corrected.

The "rail" policy review in early 2018 led to the gradual inclusion of rail milling operations to remove the defects responsible for geometrical flaws from a surface layer. In addition to improved stability, this process should extend rail life, translating into fewer rail sections needing replacement.

Combined with the deployment of the rail line repair process (HWR) and the milling operations, the productivity generated will be in phase with the performance plan.

SNCF Réseau is continuing to actively pursue its Operational Excellence programme in support of economic performance. Now more than ever, innovation and digital transformation represent major strategic policies for SNCF Réseau and applications are numerous:

- The development and deployment of computer-assisted maintenance management software (CMMS) is continuing according to a specific schedule. Systematic preventive maintenance will be fully rolled out by the end of 2018. The monitoring of anomaly processing will be in place by Q1 2019.
- The use of measurement trains to automate and modernise network surveillance is growing (SIM – SURVEILLE). In addition to improving employee safety vis-a-vis railway risk, these trains should replace a certain number of manual inspections. Progress is still needed regarding the availability rate of these trains and the replacement procedures.
- The introduction of sensors at facilities and the mathematical data modelling should gradually lead to predictive maintenance, thus reducing the incident rate while boosting productivity.
- Roll-out of the new rail correction and welding technique, certified in 2015, is continuing. It reduces the duration of projects and traffic interruption times and prevents potential faults.
- The maintenance activities will be equipped with new digital applications in addition to those already set up in 2016 and 2017.

Network reliability improved in the dense zone, with the continuation of the Lyon rail hub special plan, itself inspired by the Ile-de-France reliability plan. In general, the Track Consistency Index has improved, even though the situation in some areas may be mixed.

By way of example, the Lyon rail hub reliability plan covers the sector between Sathonay and Grenay, as well as the lines adjacent to the Lyon centre. Extremely dense traffic is thus concentrated on an aging infrastructure. In addition to the planned investments, a special maintenance plan will extend to 2020. The goal is to mitigate the consequences of the infrastructure's obsolescence until the Network Operations Centralised Command project is in place, with track renewal now under way.

The treatment of vegetation remains a focal point and the outsourcing of operations in this area is continuing. The introduction of new processes, in partnership with specialised companies, should have a radical impact on the results.

#### 5.4. PROPERTY AND REAL ESTATE ACTIVITY

##### - Disposals and participation in the national housing policy

SNCF Réseau carried out 117 disposals for a total of 69 hectares that will be used to develop around 1,885 housing units.

The main transactions in 2018 involved the sale of land and a space to SPLA Paris Batignolles Aménagement, the sale of a 11,261 m<sup>2</sup> plot of land on the Ilot Est of the Yèbles de Changis ZAC (joint development zone) in Avon, enabling the construction of 250 housing units and 3,300 social residences and the sale of a 6,853 m<sup>2</sup> property as part of the Noisy-Petit-Noisy urban development project..

INDICATORS	2018	2017	2016
Surface areas transferred during the year (hectares)	124	240	1,474
<i>of which surface areas transferred for the construction of housing (hectares)</i>	18	218	232,1
Number of housing units built (nb)	1,885	3,492	32
<i>of which number of social housing units built (nb)</i>	695	1,362	1,099

##### - Streamlining of tertiary and logistics sites

The bundling of services involving the South-East Engineering Zone Department and the SNCF Réseau Provence-Alpes-Côte d'Azur (PACA) Regional Department in the TriAngle Saint-Charles building leased in Marseilles enabled the renovation of team work spaces through a 222 m<sup>2</sup> reduction of surface areas (-4%). The signing of a lease in Saint-Quentin-Fallavier to reuse the Lyon Infralog inventories reduced developed surface areas by 29% and outdoor surface areas by 57%.

##### - Contribution to the growth of real estate transactions

Following the creation in 2017 of 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, a Strategic Committee meeting was held for the first time in December 2018.

In anticipation of the 2024 Olympics and the arrival of the CDG Express in the Paris Est station in 2024, a land agreement was signed with SNCF Mobilités to roll out the Gare du Nord 2024 project relating to the modernisation of Gare du Nord station. To provide Gares & Connexions with the land control necessary for the project, the agreement stipulates that SNCF Réseau will sell spaces located on top of the 108/110 buildings, spaces located in the bus station buildings, and several spaces overlooking the tracks. This project, initiated in 2017, will be completed in 2024 prior to the Olympic and Paralympic Games.

The Gobelins sites and part of the Invalides station have been selected as part of an innovative call for urban projects known as "Reinvent Paris 2". SNCF Réseau has expanded its role at the Invalides site as part of the property's development and extended its occupancy leases to 2021 pending the sale on the Gobelins site.

The "Reinvent the Greater Paris region" programme now has six sites: the Ardoines, Bercy-Charenton, Charenton, Orly-Rungis, Pleyel and Argenteuil. With respect to the Argenteuil site, the Local Urban Development Plan covering the modifications necessary for the project's development has been approved. SNCF Réseau's sale of a 7,660 m<sup>2</sup> lot and the purchase of premises to assemble the teams are covered by promises of sale.

##### - Network refurbishment support

The renovation of SNCF Réseau's training facilities is continuing, particularly in regard to the creation of two campuses in the Lyon and Bordeaux regions.

SNCF Réseau has authorised the construction of an annex to the Saint-Pierre-des-Corps Infra Equipment Maintenance Centre with a surface area of 2,600 m<sup>2</sup>. Covering the Droué site, this project will enable autonomous maintenance for LGV Atlantique locomotives and optimise productivity.

##### - Development of unused lines

SNCF Réseau owns kilometres 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.

INDICATORS	2018	2017	2016
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Surface areas transferred during the year (hectares)	124	240	1,474
of which surface areas transferred for the construction of housing (hectares)	18	218	23
Number of housing units built (nb)	1,885	3,492	2,132
of which number of social housing units built (nb)	695	1,362	1,099

## 6. COMPANY ECONOMIC ACTIVITY

### 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: Public partners include the Agence de financement des infrastructures de transport de France (AFITF) or other regional authorities.

As at 31 December 2018, grants claimed by SNCF Réseau amounted to €1,546 million, including €340 million from the AFITF.

Grant receivables due stood at €381 million (including €268 million pending from the French State and the AFITF), compared to €799 million (including €370 million from the French State and the AFITF) as at 31 December 2017. For the SEA project in particular, grant receivables due amounted to €252 million (including €217 million from the French State) as at 31 December 2018.

### 6.2. TAXATION

As at 31 December 2018, 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.

## 7. EMPLOYEE MATTERS

For further information on “employee matters”, see the SNCF Réseau consolidated financial statements.

## 8. INFORMATION ON PAYMENT DEADLINES

### 8.1. SUPPLIERS

As at 31 December 2018, amounts payable to suppliers totalled €2,857 million, reconciled as follows with the figures shown in the financial statements:

In € millions	2018	2017	Change
Trade payables and related accounts shown in balance sheet liabilities	510	678	-168
Purchase invoice accruals included under this heading	2,329	2,036	292
Contract warranties and penalties included under this heading	17	17	1
<b>Total</b>	<b>2,857</b>	<b>2,731</b>	<b>125</b>

Breakdown of trade payables and related accounts totalling €510 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)
<b>(A) Payment delay slots*</b>						
Total number of invoices	37,437					7,697
Amount of asset invoices including tax (€ millions)	-19	-2	-1	-	1	-2
Amount of operating invoices including tax (€ millions)	-470	-3	-7	-3	-6	-18
<b>Total amount of invoices including tax (€ millions)</b>	<b>-489</b>	<b>-4</b>	<b>-8</b>	<b>-3</b>	<b>-5</b>	<b>-20</b>
Percentage of total purchase invoices including tax	-6.5%	-0.1%	-0.1%	0.0%	-0.1%	-0.3%
<b>(B) Invoices excluded from (A) relating to disputed or unrecorded debts</b>						
Number of outstanding invoices excluded	1,661 not recorded					
Total amount of outstanding invoices excluded including tax	0					
<b>(C) Benchmark settlement periods used (contractual or legal period)</b>						
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.

### 8.2. CUSTOMERS

	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day and more)
<b>(A) Payment delay slots*</b>					
Total number of invoices					5,845
Total amount of invoices including tax (other operating receivables)	234	0	2	15	251
Percentage of total sales invoices including tax for the year (other operating receivables)	3.1%	0.0%	0.0%	0.2%	3.3%
<b>(B) Invoices excluded from (A) relating to disputed or unrecorded debts</b>					
Number of invoices excluded	1,050 disputed				
Total amount of excluded invoices including tax	26.35				
<b>(C) Benchmark settlement periods used (contractual or legal period)</b>					
Legal periods	60 days from invoice issue date by default or 45 days from the month-end				
Contractual periods	Depending on the activity (*), they vary between 30d/45d as from the invoice issue or receipt date				



## 9. RISKS AND THEIR MANAGEMENT

For further information on “Risks and their management” see the Integrated Report to the SNCF Réseau Consolidated Financial Statements.

## 11. CHALLENGES AND OUTLOOK

In the context of the new railway pact and the ongoing Nouvel’R project, SNCF Réseau’s planning is centred on its 2030 strategic vision; therefore, in 2019, several projects will be launched to prepare the new SNCF as it faces the opening of rail company competition.

Fiscal 2019 will be a pivotal and active year for SNCF Réseau as it prepares for the 1 January 2020 implementation of the main measures of the new railway pact, and specifically the change in legal form to a public limited company with public capital. This will provide greater flexibility while it remains a State company, and unified station management thanks to the transfer of Gares et Connexions via a subsidiary.

The new railway pact will also build a new and more competitive labour framework for the company, an arrangement that railway workers and future candidates will find more appealing and motivational. The opening to competition and digital transformation represent true challenges in terms of changing business lines. Likewise, performance and productivity requirements and the end of railway employee status in hiring pursuant to the law are all factors that will result in the negotiation of a new collective agreement and new company agreements for the rail sector based on the new railway pact.

The roll-out of the Nouvel’R corporate plan will continue in order to complete SNCF Réseau’s transformation, prepare the network of tomorrow and better satisfy client expectations. Nouvel’R is a long-term project that will:

- stabilise processes and increase transversal thinking in our management methods within one year;
- significantly boost service quality and meet economic performance targets within three years;
- present the first results of the High-Performance Network within ten years.

The operational transformation project to obtain a “high performance” network comprises several modernisation

## 10. CORPORATE SOCIAL RESPONSIBILITY

For further information on “Corporate social responsibility,” see the SNCF Réseau Consolidated Financial Statements.

modules to significantly reduce signalling system failures, optimise line capacity or gain greater productivity in relation to centralised traffic command. The impacts of these modules will be multiplied when they are rolled out simultaneously.

Network modernisation and improvement efforts will continue in the coming years. In line with the Eole project, the RER E’s extension west of Paris will reduce passenger traffic for the RER A, B and D lines and will be commissioned in two phases: in 2022 for the Haussmann-Saint-Lazare – Nanterre-la-Folie section and in 2024 for the complete line to Mantes-la-Jolie.

The Paris-Nord station will be expanded significantly to accommodate the growth of all SNCF Mobilités transport activities. The number of daily passengers should in fact increase by over 40% by 2030. The work should triple passenger spaces, from 36,000 m<sup>2</sup> to 110,000 m<sup>2</sup>: a new departure terminal will ease traffic flow, the Channel terminal will be enlarged, traffic spaces will be multiplied by 2.5 and accessibility will be enhanced by increasing the number of lifts and escalators. This work will be completed for the 2024 Olympics.

Service quality is also one of the key drivers highlighted by SNCF Réseau as part of its 2030 strategy. Through the H:00 and FIRST approaches, priority will be given to passenger information and regularity by providing rail services that are more punctual and robust with corrections of network causes.

Safety is of course a major challenge for SNCF Réseau, particularly through the PRISME programme, which will apply a safety excellence approach based on six pillars: Employee “Proactivity”, “Risk” analysis, management of entity “Interfaces”, procedural “Simplification”, creation of “Managerial” conditions conducive to personal employee involvement, and access to highly innovative “Equipment”.

Fiscal 2019 will therefore be a year of new challenges, where the involvement of all will contribute to collective success.

# 05 – SNCF RÉSEAU FINANCIAL STATEMENTS

French accounting standards – In € millions



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## BALANCE SHEET

ASSETS	Note	31 December 2018		31 December 2017	
		Gross	Depreciation, amortisation and impairment	Net	Net
Intangible assets	4.1	2,011	-599	1,413	1,230
Property, plant and equipment	4.2	82,656	-37,255	45,400	44,937
Intangible assets in the course of construction	4.1	205	-	205	141
Property, plant and equipment in the course of construction	4.2	11,173	-28	11,145	12,081
Long-term investments	4.3	3,926	-0	3,926	3,610
<b>Total non-current assets</b>		<b>99,972</b>	<b>-37,883</b>	<b>62,089</b>	<b>61,999</b>
Inventories and work-in-progress	4.4	631	-100	530	524
Payments on account for inventories	4.5	103	-	103	106
Trade receivables and related accounts	4.5	1,336	-43	1,293	1,286
Other receivables	4.5	3,198	-70	3,128	3,189
Marketable securities	4.7	1,908	-0	1,908	2,281
Cash at bank and in hand	4.7	884	-	884	1,086
Prepaid expenses		34	-	34	36
<b>Total current assets</b>		<b>8,094</b>	<b>-213</b>	<b>7,881</b>	<b>8,508</b>
Prepayments and deferred charges	4.8	1,841	-528	1,313	1,044
Unrealised foreign exchange losses	4.9	2,286	-	2,286	2,033
<b>Total assets</b>		<b>112,193</b>	<b>-38,624</b>	<b>73,569</b>	<b>73,584</b>

<b>EQUITY AND LIABILITIES</b>	<b>Note</b>	<b>31 December 2018</b>	<b>31 December 2017</b>
Share capital	4.10	9,765	9,765
Accumulated deficit	4.10	-25,050	-24,755
Net profit/(loss) for the year	4.10	-4,221	-295
Investment grants	4.11	26,410	25,312
<b>Equity</b>		<b>6,904</b>	<b>10,027</b>
Provisions for liabilities	4.12	391	395
Provisions for charges	4.12	1,075	1,093
<b>Provisions</b>		<b>1,466</b>	<b>1,487</b>
Other bonds	4.13	47,706	46,394
Bank borrowings	4.13	427	427
Miscellaneous borrowings	4.13	5,268	3,932
<b>Borrowings</b>		<b>53,402</b>	<b>50,753</b>
Payments received on account for orders		279	261
Trade payables and related accounts	4.14	2,841	2,731
Tax and employee-related payables	4.14	1,065	1,076
Other operating payables	4.14	1,998	2,069
Deferred income		823	760
Other accruals and deferred income	4.16	2,803	2,640
<b>Other payables</b>		<b>9,809</b>	<b>9,538</b>
Unrealised foreign exchange gains	4.17	1,987	1,779
<b>Total equity &amp; liabilities</b>		<b>73,569</b>	<b>73,584</b>

## INCOME STATEMENT

INCOME STATEMENT	Note	31 December 2018	31 December 2017
Revenue	5.1	6,233	6,466
Own production and change in inventories and WIP	5.2	4,738	4,429
Purchases and external charges	5.4	-5,924	-5,492
<b>Added value</b>		<b>5,047</b>	<b>5,402</b>
Other operating income (including operating grants)	5.3	201	148
Taxes and duties other than income tax	5.5	-234	-214
Employee benefit expense	5.6	-3,533	-3,588
<b>Gross profit</b>		<b>1,480</b>	<b>1,748</b>
Reversal of impairment, operating provisions and investment grants; Expense reclassifications	5.8	1,316	1,134
Depreciation, amortisation, impairment and operating provisions	5.8	-2,278	-1,925
Other management expenses		-0	-1
<b>Operating profit/(loss)</b>		<b>517</b>	<b>957</b>
Financial income	5.9	879	578
Financial expenses	5.9	-2,363	-2,004
<b>Finance cost</b>		<b>-1,484</b>	<b>-1,426</b>
<b>Net profit/(loss) from ordinary activities before tax</b>		<b>-967</b>	<b>-469</b>
Exceptional income	5.10	500	464
Exceptional expenses	5.10	-3,841	-396
<b>Exceptional profit/(loss)</b>		<b>-3,341</b>	<b>68</b>
Corporate income tax	6	86	106
<b>Net profit/(loss) for the year</b>		<b>-4,221</b>	<b>-295</b>

## CASH FLOW STATEMENT

In € millions	31 December 2018	31 December 2017
Net profit/(loss) for the year	-4,221	-295
<b>Net profit/(loss) for the year</b>	<b>-4,221</b>	<b>-295</b>
Eliminations:		
depreciation, amortisation, and provisions	4,275	823
revaluation gains/losses	5	-0
net proceeds from disposals and gains and losses on dilution	-60	-74
<b>Cash from operations after net borrowing costs and taxes</b>	<b>-2</b>	<b>454</b>
Eliminations:		
deferred tax expense(income)	4	-2
net borrowing costs	1,558	1,435
dividend income	-1	-0
<b>Cash from operations before net borrowing costs and taxes</b>	<b>1,559</b>	<b>1,886</b>
Impact of change in working capital requirement	49	-98
Taxes paid (collected)	-4	2
Dividends received	1	0
<b>Cash flow used in operating activities</b>	<b>1,606</b>	<b>1,791</b>
Purchases of intangible assets and property, plant and equipment	-4,911	-5,202
Impact of changes in WCR on purchases of intangible assets and PP&E	48	269
Disposals of intangible assets and property, plant and equipment	97	94
Acquisition of financial assets	-	-2
Changes in loans and advances	-229	-247
Investment grants received	2,034	2,219
Impact of changes in WCR on investment grants	26	131
<b>Cash flow used in investing activities</b>	<b>-2,935</b>	<b>-2,738</b>
Issue of debt instruments	2,277	4,878
Borrowing repayments	-1,179	-1,386
Payments relating to PPP payables	-275	-63
Receipts relating to PPP receivables	271	63
Net borrowing costs paid	-1,519	-1,392
Impact of changes in financial WCR	41	-
Change in cash liabilities and assets	1,194	-1,023
<b>Cash flow from/(used in) financing activities</b>	<b>811</b>	<b>1,078</b>
<b>Increase (decrease) in cash and cash equivalents</b>	<b>-519</b>	<b>130</b>
Opening cash and cash equivalents	3,306	3,176
Closing cash and cash equivalents	2,787	3,306

## 05 – Financial statements

The financial statements are presented in millions of euros.

SNCF Réseau's financial statements were approved on 22/02/2019 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 [www.sncf-reseau.com](http://www.sncf-reseau.com).

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.com](http://www.sncf.com)



## 1. MAJOR EVENTS

### 1.1. RAIL REFORM

The law for a new railway pact was finally adopted and published in the *Journal Officiel* on 28 June 2018 and various reform measures were announced by the French government. The first order was published in December 2018, and will be supplemented with additional orders that have still to be finalised.

The measures set out in this new railway pact law include:

- A new golden rule will cover a wider scope,
- Gares & Connexions will be entrusted with the unified management of passenger stations via an SNCF Réseau subsidiary,
- Limitation of changes in infrastructure fee pricing with regard to inflation for non-regulated activities,
- the French government will absorb €35 billion of SNCF Réseau's debt in order to substantially improve the company's financial structure. This will occur in two phases:
  - €25 billion as at 1 January 2020,
  - €10 billion as at 1 January 2022.

In a press release dated 26 November 2018 and via Agence France Trésor, the French Ministry of the Economy and Finance indicated that "this the debt absorption would consist in setting up a mechanism of identical mirror loans between SNCF Réseau and the Caisse de la Dette Publique (CDP), following which the French State would replace SNCF Réseau

as CDP's debtor, upon the French Parliament's authorisation under a finance law, thus relieving the company of the corresponding debt".

The equal treatment of the company's bondholders will be fully preserved under the terms and conditions governing the French State's absorption of the SNCF Réseau debt.

### 1.2. IMPAIRMENT TEST

For the 30/06/2018 accounts closing, the authorisation law for a new railway pact adopted on 14 June 2018 and the various announcements by the French government, particularly regarding the change in fee indexations or the assumption of the debt were indications of impairment. A new test was therefore carried out on 30/06/2018.

The outcome of this test gave rise to another asset impairment loss of €3.4 billion as at 30/06/2018, in addition to the €9.6 billion impairment loss recognised as at 31/12/2015.

As part of the 31/12/2018 closing, SNCF Réseau did not identify any new indications of impairment and did not conduct any new impairment tests.

## 2. SUBSEQUENT EVENTS

### ARAFER opinion

ARAFER's opinion on fee pricing for the 2020 service timetable for regulated activities was not considered as an indication of impairment (see Note 4.5).

The decree approving the concession agreement for the CDG Express, a high-speed train linking Paris to Roissy airport in twenty minutes as from 2024 was published in the *Journal Officiel* on 16 February 2019.

On 11 February 2019, the French Transport Ministry announced the signing of the agreement with the infrastructure manager, a company equally held by ADP, SNCF Réseau and the Caisse des Dépôts.

### CDG Express

### 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.

Pursuant to ANC regulation 2015-05, SNCF Réseau recognises its foreign currency borrowings at the closing rate, and records the foreign exchange gains and losses in the balance sheet.

The same principle was applied retroactively to 31/12/2017 for the recognition of the inflation indexation risk to harmonise the treatment with that of foreign currency risk. The nominal amount of debt indexed to inflation was therefore revalued at the closing index, generating an opening valuation difference of +€113 million for the debt and, under the matching principle, a valuation difference in the same amount (-€113 million) for the hedging derivative instruments. The impacts are detailed in Notes 4.8, 4.9 and 4.17.

#### 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

###### General principle

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.

## **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.).

These grants are recorded 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 obligations

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 2018, this agreement covering wage increases and financial aid to buy back quarters from former apprentices resulted in the recognition of a provision for €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 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 a 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**

The general principles for the recognition of forward financial instruments set out in the French General Chart of Accounts have not changed, however under ANC 2015-05 regulation hedge accounting is mandatory when it is set up for management purposes. All derivatives designated for

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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 derivatives 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. Management of currency risk

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. Liquidity risk management**

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. 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. 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. The plan in question is the special pension scheme for employees with EPIC SNCF Réseau qualifying status since the creation of the SNCF employee pension and provident fund (Caisse autonome de Prévoyance et de Retraite du personnel de SNCF) in 2007.

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.

## 4. NOTES TO THE BALANCE SHEET

## 4.1. INTANGIBLE ASSETS

	31 December 2018			31 December 2017		
	Gross	Amortisation and impairment	Net	Gross	Amortisation and impairment	Net
Intangible assets	2,011	-599	1,413	1,712	-482	1,230
Intangible assets in the course of development	205	-	205	141	-	141
<b>Total</b>	<b>2,217</b>	<b>-599</b>	<b>1,618</b>	<b>1,853</b>	<b>-482</b>	<b>1,371</b>

	Intangible assets	Intangible assets in the course of development	Total
<b>Net carrying amount as at 31/12/2017</b>	<b>1,230</b>	<b>141</b>	<b>1,371</b>
Gross acquisitions	12	101	113
Gross disposals	-2	-	-2
Amortisation	-111	-	-111
Amortisation reversals	1	-0	1
Provisions for impairment	14	-	14
Impairment losses	-22	-	-22
Commissionings	290	-44	246
Other changes	-0	7	7
<b>Net carrying amount as at 31/12/2018</b>	<b>1,413</b>	<b>205</b>	<b>1,618</b>

Intangible asset investments in 2018 amounted to €113 million and primarily included internally generated software commissioned or in the course of development.

## 4.2. PROPERTY, PLANT AND EQUIPMENT

	31 December 2018			31 December 2017		
	Gross	Depreciation and impairment	Net	Gross	Depreciation and impairment	Net
Land and buildings	11,694	-3,911	7,783	11,301	-3,280	8,021
Tracks, earthworks, engineering works and level crossings	52,619	-22,387	30,232	47,930	-18,924	29,006
Industrial and technical plant (ITP) and other assets	1,087	-798	289	1,086	-743	343
Electrification, telecommunications, signalling	16,113	-9,167	6,946	15,510	-8,135	7,375
Transportation equipment	1,143	-993	150	1,157	-966	192
Property, plant and equipment in the course of construction	11,173	-28	11,145	12,116	-35	12,081
<b>Total</b>	<b>93,829</b>	<b>-37,284</b>	<b>56,545</b>	<b>89,100</b>	<b>-32,082</b>	<b>57,018</b>



	Land and buildings	Tracks, earthworks, engineering works and level crossings	Industrial and technical plant (ITP) and other assets	Electrification, telecommunications, signalling	Transportation equipment	Property, plant and equipment in the course of construction	Total
<b>Net carrying amount as at 31/12/2017</b>	<b>8,021</b>	<b>29,006</b>	<b>343</b>	<b>7,375</b>	<b>192</b>	<b>12,081</b>	<b>57,018</b>
Gross acquisitions	-	-	-	-0	-	4,855	4,855
Gross disposals	-16	-	-15	-0	-6	-	-38
Depreciation	-111	-1,399	-44	-649	-32	-21	-2,257
Provisions for impairment	15	247	0	90	7	19	378
Depreciation reversals	3	-0	16	0	6	-48	-23
Impairment losses	-751	-2,096	-28	-472	-30	-	-3,378
Commissionings	373	4,689	53	603	14	-5,978	-246
Other changes	251	-216	-35	0	-0	237	237
<b>Net carrying amount as at 31/12/2018</b>	<b>7,783</b>	<b>30,232</b>	<b>289</b>	<b>6,946</b>	<b>150</b>	<b>11,145</b>	<b>56,545</b>

As at 30 June 2018, an addition asset impairment loss of €3,400 million was recorded in the accounts, bringing the total impairment amount to €13,000 million. The amount recorded for property, plant and equipment was €3,378 million as at 31 December 2018.

Assets impaired as at 31 December 2015 and 30 June 2018 were subject to an exceptional depreciation charge based on the initial depreciation plan. An asset impairment reversal was recognised as at 31 December 2018 for €378 million.

#### 4.2.1. Investments

Investments in property, plant and equipment for 2018 totalled €4,855 million and mainly include:

- €4,646 million in infrastructure investments which break down as follows:
  - o €4,316 million in direct production,
  - o -€59 million in payments on account,
  - o €258 million in direct acquisitions,
  - o €131 million in major repairs.
- €209 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 €5,978 million:

€322 million in commissioning of PPPs and concessions (SEA: €243 million, GSMR: €19 million and CNM: €59 million),

- €5,538 million for railway projects,
- €322 million in commissioning of PPPs and concessions (SEA: €243 million, GSMR: €19 million and CNM: €59 million),
- €118 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 €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 and was used to confirm the network's economic value.

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 represented an indication of impairment for Infrastructure CGU assets. The new test carried out did not give rise to the recognition of an impairment change.

As at 30/06/2018, the adoption on 14 June 2018 of the authorisation law for a new railway pact and the various announcements by the French government, particularly regarding the change in SNCF Réseau infrastructure fee terms and conditions represented new indications of impairment. A new test was therefore carried out using available information taken from:

- the reference framework for the PRG economic and financial trajectory and its roll-out for SNCF Réseau that was presented for information purposes to the Board of Directors on 25 July 2018,
- exchanges with the French State that led to the definition of the trajectory's structural components as mentioned below.

This test gave rise to the recognition of additional impairment of €3.4 billion, the network's recoverable amount totalling €30.1 billion, of which 93% represented by the terminal value, for a reference net carrying amount of €33.5 billion as at 30/06/2018. It should be noted that the 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.

As part of the 31/12/2018 closing, SNCF Réseau did not identify any new indications of impairment for its infrastructure assets and did not therefore conduct any impairment tests.

It should be noted that ARAFER's opinion of 7 February 2019 on the fee pricing for the 2020 service timetable for SNCF Réseau regulated activities was not considered as an indication of impairment insofar as it should not apply to the years after 2020.

The French State notified SNCF Réseau of a draft order, pursuant to Article 33 of the Law of 27 June 2018 for a new railway pact, that will introduce, within Article 2133-5 of the French Transport Code, the fact that the infrastructure fees of regulated activities will be deemed as sustainable once there is a public service agreement guaranteeing the economic balance for the railway companies in the relevant market segments, while ensuring that the overall fee amount payable by a regulated transport activity does not exceed the share of the full cost of managing the network attributable to such activity. This draft order is currently being consulted at ARAFER and the Conseil d'Etat. It will be published by no later than 31 March 2019, the date on which the authorisation granted to the French Government by the French Parliament to adopt measures regarding this matter by enacting orders expires.

It should be noted that the net carrying amount of Infrastructure CGU assets was €31.0 billion as at 31 December 2018, compared with €32.8 billion as at 31 December 2017, after impairment recognised in previous years. These assets cover service lines and ongoing renewal work.

Other assets under construction (€1.8 billion as at 31 December 2018, compared to €0.9 billion as at 31 December 2017) involve capacity investments under development, whose value is analysed separately as part of a specific review.

The methodological items used to determine the recoverable amount as at 30/06/2018 as well as the various key assumptions are shown below:

The methodology adopted was identical to that applied during the previous impairment test.

It should be noted that the discounted forecast cash flows are calculated over the ten-year business trajectory from the 2017-2026 performance contract with the French State updated for new available information and extended until 2030, which continues to represent a normative year, as the network will therefore be considered as stabilised at that date with a sufficient level of performance or renewal to optimise the amount of maintenance. 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% with no change compared to the rate used for the test carried out on 31 December 2017.

The key test assumptions involved the levels of infrastructure fees, investments, productivity as well as government loans.

These assumptions were updated to take into account the agreements signed between the company and the French State resulting from the new economic and financial trajectory regarding:

- Changes in infrastructure indexation: limitation on the increase in TGV and freight infrastructure fees at the IPC index (1.75%) replacing the indexation set out in the previous performance contract and at the same time maintenance of the indexed pricing for regulated infrastructure fees, i.e. TER and TET access fees, pursuant to the initial performance contract and applicable regulations,
- With regard to freight pricing, maintenance by the French State of the offsetting mechanism, whose amount was raised to take into account the changes in indexation and the transition to the directly attributable cost model in connection with the 2019 pricing,
- Additional investments scheduled as from 2020 for around €200 million per year (at constant 2016 euros). These investments will confirm the quality of the renewed network in 2030,
- A gradual increase in financing for safety and accessibility expenses (outside the Greater Paris region) to achieve full financing as from 2024,
- Additional future productivity work for current €300 million until 2026 as well as the current €1.2 billion for productivity already recorded in the performance contract,
- The payment of investment grants by the French State on behalf of SNCF Réseau allocated to the financing of renewal investments for amounts revised upwards compared to the performance contract to achieve annual amounts of €988 million. These grants resulted from the French State's allocation of all or part of the dividends collected by SNCF from SNCF Mobilités' P&L, in addition to the transfer of a share of the Public Rail Group's tax consolidation income. The renewal investment grant amounts taken into account are based on the PRG's economic and financial trajectory as part of the Group's current tax and legal organisation that was also presented to the Supervisory Board on 27 July for information purposes.

The 10-year traffic forecasts for SNCF Mobilités were drawn up in connection with the Public Rail Group and are consistent with those of SNCF Mobilités.

The results of the sensitivity analyses carried out for the 30/06/2018 test were as follows:

Sensitivity to the valuation parameters:

A change of +/- 10 basis points in the discount rate represents a change of +/- €1.2 billion in the recoverable amount.

A change of +/- 10 basis points in the perpetual growth rate results in a change of +€0.8 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 +/- €2.0 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.

## 4.3. LONG-TERM INVESTMENTS

	31 December 2018	31 December 2017	Change
Investment grants to be claimed	2,278	2,227	51
Guarantee deposits	1,605	1,338	266
Other financial receivables	14	16	-2
Equity investments	29	29	-
<b>Total</b>	<b>3,926</b>	<b>3,611</b>	<b>315</b>

As at 31 December 2018, long-term investments comprised grants to be claimed in the amount of €2,278 million for current PPP agreements, including €1,155 million for the BPL project and €1,119 million for the CNM 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 and Oc'Via.

SNCF Réseau recorded borrowings for the same amounts that it has also repaid since 2017 (see Note 4.13 Borrowings).

“Guarantee deposits” primarily comprise asset margin calls (€1,120 million, see Note 4.13 Borrowings) and the Eole piggy-backing (€479 million).

Financial receivables totaling € 14 million mainly relate to cash advances made to a subsidiary

The financial receivables of €14 million mainly correspond to cash advances from a subsidiary.

Information in thousands of euros (K€)	Share capital	Equity	Capital held	Percentage of capital or earnings held	Carrying amount of shares held		Loans and advances granted by the companies and not yet repaid	Guarantees and endorsements granted by the company	Pre-tax revenue of the prior year	Earnings (profit or loss of the prior year ended)	Dividends collected by the company during the year
					Gross	Net					
Subsidiary name and registered office											
<b>1. Subsidiaries</b>											
<b>SFERIS</b> 1 CITE PARADIS, 75010 Paris	1,500	6,788	1,500	100.0%	6,000	6,000	12,000	-	90,816	1,455	-
<b>ALTAMETRIS</b> 130 rue du Faubourg Saint Denis, 75010 Paris	2,108	2,056	2,108	100.0%	800	800	0	0	2,450	-52	0
<b>2. Affiliates</b>											
<b>EURAILSCOUT BV</b> Amersfoort, Niederlande	20,346	25,473	10,173	50.0%	21,800	21,800	-	-	26	2	-
<b>ADIF Perpignan Figueras (LFP)</b> Rue Sor angela de la cruz, N3 Madrid	60	60	30	50.0%	30	30	-	-	-	-	-
<b>SNCF INFRA LBA DEVELOPPEMENT</b> 18 RUE DE DUNKERQUE, 75010 Paris	350	270	140	40.0%	138	138	-	-	NC	(11)	-
<b>CDG EXPRESS ETUDES</b> 291 bld Raspail 75014 Paris	9.9	9.9	3	33.3%	3.3	3.3	-	-	-	-	-
<b>CADEMCE</b> 14 VC QUAI DE LA SOMME, 80080 Amiens	1,860	NC	464	25.0%	464	464	-	-	NC	NC	-
<b>EURAILSCOUT France</b> 20 RUE DES PETITS HOTELS, 75010 Paris	38	1,535	1	2.6%	1	1	-	-	7,689	0	-
<b>GEIE CFM4 (freight railway corridor no. 4)</b> 92, av de France, 75013 Paris	-	-	-	33.0%	-	-	-	-	-	NC	-
<b>GEIE SEA VITORIA DAX</b> 7 A TERRASSE DU FRONT DU MEDOC, 33075 Bordeaux	-	-	-	50.0%	-	-	-	-	-	NC	-
<b>GEIE NAF GCT</b> PLACE DE NUESTRA SENORA DEL PILAR, 50071 Saragossa	-	-	-	50.0%	-	-	-	-	-	NC	-
<b>GEIE RFC2 CORRIDOR C</b> 9 PLACE DE LA GARE, L1616 Luxembourg	0	0	0	49.0%	0	0	0	0	0	NC	0
<b>GEIE RFC6</b> PIAZZA DELLA CROCE ROSSA, 00161 Rome	0	-	-	20.0%	-	-	-	-	-	NC	-
<b>GEIE DES UTILISATEURS DE ERTMS</b> 123/133 RUE FROISSAR, 1040 Brussels	-	-	-	16.7%	-	-	-	-	-	NC	-
<b>RAILENIUM</b> Académie de Lille VALENCIENNES	-	-	-	-	-	-	-	-	-	-	-

4.4. WORKING CAPITAL REQUIREMENT

4.4.1. Inventories and work-in-progress

	31 December 2018	31 December 2017	Change during the year	31 December 2017	Increase	Decrease	31 December 2018
	<b>Gross</b>	<b>Gross</b>					
Raw materials	529	542	-13	-114	-14	28	-100
Finished goods	85	73	13	-	-	-	-
Work-in-progress	16	22	-6	-	-	-	-
<b>Total inventories and work-in-</b>	<b>631</b>	<b>637</b>	<b>-6</b>	<b>-114</b>	<b>-14</b>	<b>28</b>	<b>-100</b>

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

4.4.2. Operating WCR

	Opening	Flow with CFS impact	Flow with no CFS impact	Closing
Trade receivables and advances, net	270	-99	-4	167
Net employee-related liabilities	-611	19	-2	-594
Trade payables and advances, net	-1,814	-177	-0	-1,991
Tax receivables and payables	237	170	1	408
Inventories	524	-6	13	530
Other operating receivables	280	-18	-4	258
Other operating payables	-191	62	-16	-146
Dividends payable	-	-	-	-
<b>OPERATING WCR</b>	<b>-1,305</b>	<b>-49</b>	<b>-12</b>	<b>-1,367</b>

4.4.3. Investment WCR

	Opening	CFS flow with WCR impact	CFS flow with no WCR impact	Flow with no CFS impact	Closing
Net receivables on non-current assets	150	-	-82	-15	54
Net payables on non-current assets	-635	-48	-	89	-594
Investment grants receivable	98	-26	-	-283	-212
<b>INVESTMENT WCR</b>	<b>-387</b>	<b>-74</b>	<b>-82</b>	<b>-209</b>	<b>-752</b>

4.4.4. Financial WCR

	Opening	Flow with CFS impact	Flow with no CFS impact	Closing
Prepaid expenses on financial transactions	260	413	240	913
Deferred income on financial transactions	-1,209	-461	-234	-1,903
Other payables and receivables	211	8	-193	27
<b>FINANCIAL WCR</b>	<b>-737</b>	<b>-41</b>	<b>-186</b>	<b>-963</b>
Accrued interest receivable	673	40	-205	507
<b>Accrued interest receivable</b>	<b>673</b>	<b>40</b>	<b>-205</b>	<b>507</b>

## 4.5. OPERATING RECEIVABLES

	31 December 2018	31 December 2017	Change during the year
<b>Trade receivables and related accounts</b>	<b>1,336</b>	<b>1,343</b>	<b>-7</b>
<b>Other operating receivables</b>	<b>3,198</b>	<b>3,277</b>	<b>-80</b>
Grants to be collected	563	969	-406
Grants to be claimed	1,117	1,097	21
VAT receivables	579	512	67
SNCF Mobilités receivable, including CICE	40	41	-0
Tax receivables and tax credits*	393	303	90
Other receivables	482	328	154
Receivables from asset disposals	23	28	-5
<b>Payments on account for inventories</b>	<b>103</b>	<b>106</b>	<b>-3</b>
<b>Total</b>	<b>4,637</b>	<b>4,726</b>	<b>-89</b>

\*€68 million in deferred tax assets classified as tax receivables.

	Impairment as at 31 December 2017	Increase	Decrease	Impairment as at 31 December 2018
Trade receivables and related accounts	-56	-91	105	-42
Other operating receivables	-88	-5	22	-71
<b>Total impairment of receivables</b>	<b>-144</b>	<b>-96</b>	<b>128</b>	<b>-112</b>

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 2018	< 1year	> 1year
<b>Trade receivables and related accounts</b>	<b>1,336</b>	<b>1,300</b>	<b>36</b>
<b>Other operating receivables</b>	<b>3,198</b>	<b>2,525</b>	<b>673</b>
Grants to be collected	563	196	367
Grants to be claimed	1,117	1,117	-
VAT receivables	579	579	-
Mobility receivable, including CICE	40	40	-
Tax receivables and tax credits	393	87	306
Other receivables	482	482	-
Receivables from asset disposals	23	23	-
<b>Payments on account for inventories</b>	<b>103</b>	<b>103</b>	<b>-</b>
<b>Gross value</b>	<b>4,637</b>	<b>3,928</b>	<b>709</b>

## 4.7. MARKETABLE AND SIMILAR SECURITIES, CASH AT BANK AND IN HAND

	31 December 2018	31 December 2017	Change during the year
<b>Initial maturity of more than three months and/or subject to interest rate risk</b>	<b>-</b>	<b>50</b>	<b>-50</b>
Negotiable debt securities	-	50	-50
<b>Initial maturity of less than three months and without interest rate risk</b>	<b>1,908</b>	<b>2,231</b>	<b>-322</b>
Negotiable debt securities	-0	25	-25
Unsecured loan	-	-	-
UCITS	1,908	2,206	-297
<b>Sub-Total Marketable securities</b>	<b>1,908</b>	<b>2,281</b>	<b>-372</b>
<b>Cash at bank and in hand</b>	<b>884</b>	<b>1,086</b>	<b>-202</b>
<b>Total</b>	<b>2,792</b>	<b>3,367</b>	<b>-574</b>

All UCITS correspond to low-risk mutual funds.

## 4.8. OTHER PREPAYMENTS AND DEFERRED CHARGES

	31 December 2018	Reclassifications and method change impacts	31 December 2017	Change during the year
Loan issue costs and premiums - Assets	232	37	200	-6
Valuation difference on derivative instruments	629	113	345	171
Other prepayments and deferred charges on financial transactions	452	-	498	-47
<b>Total Other prepayments and deferred charges - Assets</b>	<b>1,313</b>	<b>150</b>	<b>1,044</b>	<b>118</b>

Method change impact with retroactive effect to 31 December 2017: the nominal amount of debt indexed to inflation was revalued at the closing index, generating an opening valuation difference of +€113 million for the debt and, under the matching principle, a valuation difference in the same amount (-€113 million) for the hedging derivative instruments.

## 4.9. UNREALISED FOREIGN EXCHANGE LOSSES

	31 December 2018	Method change impacts	31 December 2017	Change during the year
Unrealised foreign exchange losses	2,286	113	2,033	141
On unhedged inflation-indexed debt	295	-	254	42
On hedged inflation-indexed debt	144	113	-	31
On hedged foreign currency debt	486	-	345	141
On hedging derivatives and IOP	1,361	-	1,434	-73
<b>Total unrealised foreign exchange losses</b>	<b>2,286</b>	<b>113</b>	<b>2,033</b>	<b>141</b>

Pursuant to the revaluation of inflation-indexed debts at the closing index, the unrealised foreign exchange loss of €113 million was offset against borrowings.

## 4.10. EQUITY

	Capital injection	Accumulated deficit	Net profit/(loss) for the year	Net worth	Investment grants	Equity
<b>Equity as at 31 December 2017</b>	<b>9,765</b>	<b>-24,755</b>	<b>-295</b>	<b>-15,285</b>	<b>25,312</b>	<b>10,027</b>
Appropriation of 2017 loss	-	-295	295	-	-	-
2018 net profit/(loss)	-	-	-4,221	-4,221	-	-4,221
Movements in grants	-	-	-	-	2,034	2,034
Grants recorded in the income statement	-	-	-	-	-944	-944
Reclassification	-	-	-	-	8	8
<b>Equity as at 31 December 2018</b>	<b>9,765</b>	<b>-25,050</b>	<b>-4,221</b>	<b>-19,507</b>	<b>26,410</b>	<b>6,904</b>

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 €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 2018, capital injections totalled €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 2018			31 December 2017		
	Grants for commissioned assets	Grants for assets in the course of construction	Total	Grants for commissioned assets	Grants for assets in the course of construction	Total
Development grants for assets in the course of construction	-	4,193	4,193	-	3,722	3,722
Development grants for commissioned assets	18,605	-	18,605	18,131	-	18,131
Renewal grants for commissioned assets	3,338	-	3,338	3,289	-	3,289
Renewal grants for assets in the course of construction	274	-	274	170	-	170
<b>Total</b>	<b>22,217</b>	<b>4,193</b>	<b>26,410</b>	<b>21,590</b>	<b>3,722</b>	<b>25,312</b>

	Net amount as at 31/12/2017	Grants allocated to commissioned assets during the year	Share of grant released to profit or loss	Other changes	Net amount as at 31/12/2018
Land, buildings and fixtures and fittings	2,685	70	-187	-373	2,195
Tracks, earthworks, engineering works and level crossings	8,626	1,035	-267	3,065	12,459
ITP, electrification, telecom	6,812	168	-362	-2,718	3,900
Intangible assets	8	-8	-7	58	51
<b>Total</b>	<b>18,131</b>	<b>1,265</b>	<b>-823</b>	<b>32</b>	<b>18,605</b>

##### 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 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 31/12/2018
2004	01/07/2004	38	675	-257	418
2005	25/03/2005	42	574	-187	387
2006	09/05/2006	42	878	-264	614
2007	21/03/2007	35	734	-246	488
2008	17/04/2008	33	69	-31	38
2009	17/01/2009	42	844	-237	607
2010	22/01/2010	38	436	-147	289
2011	01/01/2011	51	20	-15	5
2012	01/01/2012	28	255	-102	153
2013	01/01/2013	41	75	-20	55
2016	01/01/2017	38	126	-7	119
2017	01/01/2018	38	170	-4	166
<b>Total renewal grants for commissioned assets</b>			<b>4,856</b>	<b>-1,518</b>	<b>3,338</b>

## 4.12. PROVISIONS FOR LIABILITIES AND CHARGES

	31 December 2017	Charges	Reversals	Reclassification	31 December 2018
Employee benefits	923	85	-96	-	912
Environmental risks	167	12	-16	-0	163
Tax and employee-related risks	57	20	-48	-	29
Contractual litigation	81	76	-94	-	63
Currency and interest rate risk	-	42	-	256	298
Financial risks	256	1	-	-256	1
Other provisions for liabilities and charges	3	0	-3	-	0
<b>Total provisions</b>	<b>1,487</b>	<b>236</b>	<b>-257</b>	<b>-0</b>	<b>1,466</b>

Employee benefits include benefits involving compensation for work-related injuries (€483 million), Gradual Cessation of Activity (€168 million), social welfare initiatives (€98 million), time savings account (€90 million), long-service awards (€24 million), the senior executive supplemental provident plan (€18 million), pensions, unemployment benefits and termination benefits (€32 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.

The provision was reversed following the repayment made to SNCF Mobilités.

An additional provision is set aside as and when new appeals are filed with the Paris Industrial Tribunal.

#### Appeal to the Conseil d'État for the calculation of T2 special pension contribution rates

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 as at 1 May 2017. Since 2 May 2017, the company has paid T2 contributions at the new rate set by decree. Nevertheless, on 23 May 2017, the company filed an appeal with the Conseil d'État in accordance with the decree of 28 June 2007, which provides for a revaluation mechanism based on changes in certain ordinary contributions. Several additional observations and observations in reply have since been produced by the company and the French State. Following the appointment of a reporting judge, the Conseil d'État hearing took place on 9 July 2018 and an unfavourable decision was issued on 18 July 2018.

Following this ruling, SNCF Réseau recorded a €2 million provision in its financial statements for the year ended 31

December 2018 impacting the valuation of employee commitments for personnel with qualifying status.

#### 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.

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.

In September 2018, the French tax authorities replied to SNCF Réseau's challenge. It waived the access fee reassessment.

SNCF Réseau continued the tax proceedings with meetings and interviews with the tax authorities which resulted in the withdrawal of the file by way of agreement. The €3 million provision for undisputed items was therefore reclassified to accrued expenses and an additional accrued expense of €3.5 million was recognised as at 31 December 2018.

The financial risks hedging was reclassified under foreign currency and interest rate risks. These provision involve indexation risks (€254 million) and swap interest rate risks (€3 million).

#### Decontamination and environmental risks

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.

Provisions for contractual litigation and risks

- May/June 2016 flooding

The provisions for bad weather were partially reversed according to the accounting of repairs.

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.

**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, closing rate remeasurement and loans to consolidated subsidiaries and loans to external third parties and advances) totalled €48.2 billion, compared to €45.5 billion as at 31 December 2017, i.e. an increase of €2.7 billion, comprising:

- Long-term resources raised by SNCF on government bond markets in 2018 represented a total repayment amount of €2.1 billion,
- Bond repayments in euros and Swiss francs for €1.2 billion,
- Increase in short-term debt less cash and cash equivalents for €1.8 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 2018	31 December 2017	Change during the year
<b>Long-term debt</b>	<b>47,447</b>	<b>46,242</b>	<b>1,205</b>
Outstanding principal:	46,761	45,591	1,170
<i>Long-term</i>	46,275	45,121	1,154
<i>RIF loans</i>	30	34	-3
<i>Zero coupon</i>	455	436	20
Accrued interest:	686	652	35
<b>SNCF debt</b>	<b>686</b>	<b>691</b>	<b>-5</b>
Outstanding principal:	665	670	-5
<i>Transferred debt (historical price)</i>	662	666	-4
<i>RIF loans</i>	3	4	-1
Accrued interest	21	21	0
<b>Guarantee deposits received</b>	<b>5</b>	<b>5</b>	<b>0</b>
<b>Short-term debt</b>	<b>2,863</b>	<b>1,620</b>	<b>1,243</b>
<b>Margin calls (Liabilities)</b>	<b>91</b>	<b>64</b>	<b>26</b>
<b>Bank overdrafts</b>	<b>20</b>	<b>23</b>	<b>-3</b>
<b>PPP payable</b>	<b>2,289</b>	<b>2,221</b>	<b>69</b>
<b>Total borrowings</b>	<b>53,402</b>	<b>50,866</b>	<b>2,536</b>
- Cash assets and investments	-2,792	-3,367	574
- PPP receivable	-2,274	-2,227	-47
- Collateral (Assets)	-1,120	-1,084	-36
- Guarantee deposits received	-6	-6	-0
- Loans to external third parties	-479	-249	-230
- Advances and loans to consolidated subsidiaries	-17	-16	-1
- Remeasurement difference - Foreign exchange hedging impact	872	1,086	-214
- Remeasurement difference - Inflation-indexation hedging impact	-144	-113	-31
<b>Net debt as a carrying amount</b>	<b>47,442</b>	<b>44,891</b>	<b>2,551</b>
- Accrued interest receivable	-708	-673	-35
- Loans to external third parties	479	249	230
- Advances and loans to consolidated subsidiaries	17	16	1
- Net guarantee deposits	1	1	-0
- Net collateral	1,029	1,019	10
- PPP net debt	-15	6	-22
<b>Net debt repayment amount</b>	<b>48,245</b>	<b>45,510</b>	<b>2,736</b>

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 2018 for the CNM and BPL PPPs for €559 million. A framework agreement was signed between SNCF Réseau and OC'Via which definitively concluded the litigation relating to the CNM PPP. As at 31 December 2018, the BPL and SEA litigations were still ongoing.

## SNCF Réseau borrowings

The following tables provide a breakdown by foreign currency and interest rate type of SNCF Réseau's short and long-term borrowings:

	Gross	One year or less	Between one and five years	More than 5 years
<b>A - SNCF Réseau debt:</b>	<b>49,624</b>	<b>4,542</b>	<b>11,671</b>	<b>33,411</b>
<b>1. Bond issues:</b>	<b>46,761</b>	<b>1,679</b>	<b>11,671</b>	<b>33,411</b>
Total fixed rate:	41,811	1,525	8,790	31,496
Total inflation:	3,438	-	2,562	877
Total floating rate:	1,511	153	319	1,038
EUR fixed rate	32,853	0	6,105	26,748
EUR inflation	3,438	-	2,562	877
EUR floating rate	1,417	153	319	944
<b>Total EUR</b>	<b>37,709</b>	<b>153</b>	<b>8,986</b>	<b>28,569</b>
AUD fixed rate	55	-	-	55
AUD floating rate	-	-	-	-
<b>Total AUD</b>	<b>55</b>	<b>-</b>	<b>-</b>	<b>55</b>
CAD fixed rate	177	-	-	177
CAD floating rate	-	-	-	-
<b>Total CAD</b>	<b>177</b>	<b>-</b>	<b>-</b>	<b>177</b>
CHF fixed rate	1,637	612	266	759
CHF floating rate	-	-	-	-
<b>Total CHF</b>	<b>1,637</b>	<b>612</b>	<b>266</b>	<b>759</b>
GBP fixed rate	3,983	-	894	3,089
GBP floating rate	94	-	-	94
<b>Total GBP</b>	<b>4,078</b>	<b>-</b>	<b>894</b>	<b>3,183</b>
HKD fixed rate	104	-	-	104
HKD floating rate	-	-	-	-
<b>Total HKD</b>	<b>104</b>	<b>-</b>	<b>-</b>	<b>104</b>
JPY fixed rate	438	40	215	184
JPY floating rate	-	-	-	-
<b>Total JPY</b>	<b>438</b>	<b>40</b>	<b>215</b>	<b>184</b>
NOK fixed rate	50	-	-	50
NOK floating rate	-	-	-	-
<b>Total NOK</b>	<b>50</b>	<b>-</b>	<b>-</b>	<b>50</b>
SEK fixed rate	223	-	-	223
SEK floating rate	-	-	-	-
<b>Total SEK</b>	<b>223</b>	<b>-</b>	<b>-</b>	<b>223</b>
USD fixed rate	2,288	873	1,310	105
USD floating rate	-	-	-	-
<b>Total USD</b>	<b>2,288</b>	<b>873</b>	<b>1,310</b>	<b>105</b>
<b>2. Negotiable debt</b>				
Treasury bills	100	100		
Commercial Paper	2,763	2,763		
EUR	950	950		
AUD	78	78		
GBP	341	341		
USD	1,395	1,395		

	Gross	One year or less	Between one and five years	More than 5 years
<b>B - ACCRUED INTEREST:</b>	<b>686</b>	<b>686</b>	-	-
<b>Bond issues:</b>	<b>686</b>	<b>686</b>	-	-
Total fixed rate:	614	614	-	-
Total inflation:	61	61	-	-
Total floating rate:	12	12	-	-
EUR fixed rate	477	477	-	-
EUR inflation	61	61	-	-
EUR floating rate	11	11	-	-
<b>Total EUR</b>	<b>548</b>	<b>548</b>	-	-
CAD fixed rate	1	1	-	-
CAD floating rate	-	-	-	-
<b>Total CAD</b>	<b>1</b>	<b>1</b>	-	-
CHF fixed rate	28	28	-	-
CHF floating rate	-	-	-	-
<b>Total CHF</b>	<b>28</b>	<b>28</b>	-	-
GBP fixed rate	89	89	-	-
GBP floating rate	1	1	-	-
<b>Total GBP</b>	<b>90</b>	<b>90</b>	-	-
HKD fixed rate	3	3	-	-
HKD floating rate	-	-	-	-
<b>Total HKD</b>	<b>3</b>	<b>3</b>	-	-
JPY fixed rate	2	2	-	-
JPY floating rate	-	-	-	-
<b>Total JPY</b>	<b>2</b>	<b>2</b>	-	-
NOK fixed rate	2	2	-	-
NOK floating rate	-	-	-	-
<b>Total NOK</b>	<b>2</b>	<b>2</b>	-	-
SEK fixed rate	3	3	-	-
SEK floating rate	-	-	-	-
<b>Total SEK</b>	<b>3</b>	<b>3</b>	-	-
USD fixed rate	9	9	-	-
USD floating rate	-	-	-	-
<b>Total USD</b>	<b>9</b>	<b>9</b>	-	-
<b>Negotiable debt securities :</b>	<b>0</b>	<b>0</b>	-	-
Treasury bills	-0	-0	-	-
Commercial Paper	-	-	-	-
USD	0	0	-	-
<b>C - DEFERRED INTEREST:</b>	<b>-7</b>	<b>-7</b>	-	-
Treasury bills	0	0	-	-
Commercial Paper	-	-	-	-
EUR	1	1	-	-
GBP	-1	-1	-	-
USD	-8	-8	-	-

## 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
<b>A - SNCF DEBT:</b>	<b>665</b>	<b>3</b>	<b>661</b>	<b>1</b>
Total fixed rate:	613	-	613	-
Total floating rate:	52	3	47	1
EUR fixed rate	613	-	613	-
EUR floating rate	52	3	47	1
<i>Of which RIF loans</i>	3	0	2	1
<b>Total EUR</b>	<b>665</b>	<b>3</b>	<b>661</b>	<b>1</b>
<b>B - Accrued interest:</b>	<b>21</b>	<b>21</b>	<b>-</b>	<b>-</b>
Total fixed rate:	21	21	-	-
Total floating rate:	-0	-0	-	-
EUR fixed rate	21	21	-	-
EUR floating rate	-0	-0	-	-
<b>Total EUR</b>	<b>21</b>	<b>21</b>	<b>-</b>	<b>-</b>

## LONG-TERM BORROWINGS

The breakdown of long-term borrowings after hedging, at the hedging rate, is as follows:

	Fixed rate		Inflation-indexed rate		Floating rate		Total	
	Dec.-18	Dec.-17	Dec.-18	Dec.-17	Dec.-18	Dec.-17	Dec.-18	Dec.-17
SNCF RESEAU	42,694	41,559	2,029	3,291	2,796	1,653	47,519	46,503
SNCF	613	613	-	-	52	57	665	670
Total EUR:	<b>43,307</b>	<b>42,172</b>	<b>2,029</b>	<b>3,291</b>	<b>2,848</b>	<b>1,710</b>	<b>48,184</b>	<b>47,173</b>
As a %:	<b>90%</b>	<b>89%</b>	<b>4%</b>	<b>7%</b>	<b>6%</b>	<b>4%</b>	<b>100%</b>	<b>100%</b>

#### 4.14. OPERATING PAYABLES AND OTHER ACCOUNTS IN CREDIT

	31 December 2018	31 December 2017	Change during the year
<b>Trade payables and related accounts</b>	<b>2,841</b>	<b>2,731</b>	<b>110</b>
<i>Of which fixed asset suppliers</i>	<i>729</i>	<i>796</i>	<i>-67</i>
<b>Tax and employee-related payables</b>	<b>1,065</b>	<b>1,076</b>	<b>-12</b>
Personnel and social security bodies	593	607	-14
Tax on revenue	424	428	-4
French State and local authorities	13	11	2
Tax payable on investments	27	27	-0
VAT on fixed assets	7	3	5
Other operating payables	<b>1,998</b>	<b>2,069</b>	<b>-70</b>
Grants claimed in advance	1,765	1,862	-98
<b>Other payables</b>	<b>234</b>	<b>206</b>	<b>27</b>
<b>Total operating payables</b>	<b>5,904</b>	<b>5,876</b>	<b>28</b>

## 4.15. DEBT MATURITY ANALYSIS - OPERATING LIABILITIES

	31 December 2018	Maturing in less than 1 year	Maturing in more than 1 year
<b>Trade payables and related accounts</b>	<b>2,841</b>	<b>2,841</b>	-
<i>Of which fixed asset suppliers</i>	<i>729</i>	<i>729</i>	-
<b>Tax and employee-related payables</b>	<b>1,065</b>	<b>1,065</b>	-
Personnel and social security bodies	593	593	-
Tax on revenue	424	424	-
French State and local authorities	13	13	-
Tax payable on investments	27	27	-
VAT on fixed assets	7	7	-
<b>Other operating payables</b>	<b>1,998</b>	<b>1,998</b>	-
Grants claimed in advance	1,765	1,765	-
Other payables	234	234	-
<b>Total operating payables</b>	<b>5,904</b>	<b>5,904</b>	-

## 4.16. OTHER ACCRUALS AND DEFERRED INCOME

	31 December 2018	Reclassifications	31 December 2017	Change during the year
Loan issue costs and premiums - Assets	1,188	37	1,109	42
Valuation difference for foreign currency hedging derivative instruments and Isolated Open Position	1,361	-	1,431	-70
Other accruals and deferred income on financial transactions	253	153	101	-0
<b>Total Other accruals and deferred income</b>	<b>2,803</b>	<b>190</b>	<b>2,641</b>	<b>-28</b>

The €153 million reclassification to Other accruals and deferred income corresponds to the increase in the nominal amount of the derivative hedging GBP zero coupon debt that was recognised in "Other operating payables".

The reclassification of issue premiums for €37 million was due to the correction in the presentation of issue premiums received deducted from issue costs and premiums in assets.

## 4.17. UNREALISED FOREIGN EXCHANGE GAINS

	31 December 2018	Method change impacts	31 December 2017	Change during the year
Unrealised foreign exchange gains	-1,987	-113	-1,779	-95
On hedged foreign currency debt	-1,358	0	-1,431	73
On hedging derivatives	-629	-113	-348	-169
<b>Total unrealised foreign exchange gains</b>	<b>-1,987</b>	<b>-113</b>	<b>-1,779</b>	<b>-95</b>

Method change impact with retroactive effect to 31 December 2017. The nominal amount of debt indexed to inflation was revalued at the closing index, generating an opening valuation difference of +€113 million for the debt and, under the matching principle, a valuation difference in the same amount (-€113 million) for the hedging derivative instruments.

## 4.18. DEFERRED INCOME

Deferred income totalled €823 million as at 31 December 2018. It primarily comprised infrastructure fees invoiced for the 2019 service timetable.



## 5. ADDITIONAL 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).

Other income primarily comprises sales of supplies (old materials) and “non-traffic” related products comprising rental income.

	31 December 2018	31 December 2017	Change during the year
Access fees	1,986	1,971	15
Reservation fees	2,053	2,078	-25
Traffic fees	1,236	1,378	-142
Platform fees	121	122	-1
Additional electrical traction fees	211	231	-20
Other proceeds	41	41	0
<b>Sub-total infrastructure sale proceeds</b>	<b>5,648</b>	<b>5,820</b>	<b>-172</b>
Other income	585	645	-60
<b>Total revenue</b>	<b>6,233</b>	<b>6,466</b>	<b>-232</b>

### 5.2. OWN PRODUCTION AND CHANGE IN INVENTORIES AND WORK-IN-PROGRESS

	31 December 2018	31 December 2017	Change during the year
Own production - Purchases and external charges	3,519	3,166	353
Own production - Employee benefit expense	1,138	1,177	-40
Change in inventories and work-in-progress	81	85	-4
<b>Total Own production</b>	<b>4,738</b>	<b>4,429</b>	<b>309</b>

### 5.3. OTHER OPERATING INCOME

	31 December 2018	31 December 2017	Change during the year
Operating grants	164	132	32
Other income	36	16	20
<b>Total Other operating income</b>	<b>201</b>	<b>148</b>	<b>52</b>

Operating grants include rate compensation paid by the French State to cover the marginal cost of freight traffic.

### 5.4. PURCHASES AND EXTERNAL CHARGES

	31 December 2018	31 December 2017	Change during the year
Transmission and traction means	-322	-281	-41
Upkeep and maintenance	-2,391	-2,236	-155
Professional fees and IT services	-774	-706	-68
Property	-775	-742	-33
Other purchases and external charges	-1,664	-1,528	-135
<b>Total</b>	<b>-5,924</b>	<b>-5,492</b>	<b>-432</b>

### 5.5. TAXES AND DUTIES OTHER THAN INCOME TAX

	31 December 2018	31 December 2017	Change during the year
Property taxes	-26	-25	-1
<b>Company value-added contribution and company property contribution</b>	<b>-84</b>	<b>-86</b>	<b>2</b>
Tax on wages	-3	-6	3
Apprenticeship tax	-12	-16	4
Vocational training	-21	-17	-5
Construction levy	-30	-10	-20
Other taxes and duties (including C3S)	-19	-20	1
Transport payment	-39	-35	-4
<b>Sub-total Other taxes and duties</b>	<b>-124</b>	<b>-103</b>	<b>-21</b>
<b>Taxes and duties other than income</b>	<b>-234</b>	<b>-214</b>	<b>-20</b>

## 5.6. EMPLOYEE BENEFIT EXPENSE

	31 December 2018	31 December 2017	Change during the year
Wages and salaries	-2,347	-2,315	-32
Pension contributions	-641	-664	23
Other social security contributions	-474	-507	34
Expenses relating to vacation, leave and early departures	-7	-31	23
<b>Sub-total</b>	<b>-3,468</b>	<b>-3,516</b>	<b>48</b>
Seconded personnel	-65	-72	7
<b>Total employee benefit expense</b>	<b>-3,533</b>	<b>-3,588</b>	<b>55</b>
<b>Total average number of paid employees</b>	<b>57,439</b>	<b>57,692</b>	<b>-253</b>

## 5.7. STATUTORY AUDITORS' FEES

Statutory auditors' fees amounted to €1 million in 2018 and break down as follows:

- statutory audit of the 2018 financial statements for €0.7 million (PwC for €0.4 million, EY for €0.3 million),
- Services other than account certification for €0.04 million (PwC)

## 5.8. DEPRECIATION, AMORTISATION AND PROVISIONS, NET

	31 December 2018	31 December 2017	Change during the year
Charge to depreciation and amortisation	-1,971	-1,703	-268
Charge to provisions for non-current assets	-21	-23	1
Charge to provisions for impairment of receivables	-96	-61	-35
Charge to provisions for inventory write-downs	-14	-13	-1
Charge to provisions for liabilities and charges	-176	-125	-51
<b>Total charges</b>	<b>-2,278</b>	<b>-1,925</b>	<b>-353</b>

	31 December 2018	31 December 2017	Change during the year
Share of the grant released to profit or loss	823	720	103
Reversal of the renewal grant	121	41	80
Reversals of provisions for non-current assets	28	22	6
Reversals of provisions for impairment of receivables	105	46	59
Reversals of provisions for inventory write-downs	28	9	19
Reversals of provisions for liabilities and charges	179	259	-80
Expense reclassifications	32	37	-5
<b>Total reversals</b>	<b>1,316</b>	<b>1,134</b>	<b>181</b>

## 5.9. FINANCE COST

	31 December 2018	31 December 2017	Change during the year
Net borrowing costs	-1,498	-1,480	-18
Net finance cost of employee benefits	16	-31	48
Dividends	1	0	1
Other financial expenses	-207	-27	-180
Other financial income	204	113	91
<b>Total finance cost</b>	<b>-1,484</b>	<b>-1,426</b>	<b>-58</b>

## 5.10. NET EXCEPTIONAL PROFIT/(LOSS)

The 2018 net exceptional loss of -€3,341 million primarily comprised the impairment loss of -€3,400 million and net proceeds from asset disposals in the amount of €60 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: €1,919 million.

SNCF Réseau recognised a tax gain of €86 million, which breaks down as follows:

- Competitiveness and Employment Tax Credit for €85 million
- Research Tax Credit for €5 million
- Sponsorship Credit and Apprenticeship Tax Credit for €1 million.
- Tax reclassification for -€5 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 2018	31 December 2017
Operating receivables	768	712
Operating payables*	882	782

\* Balance sheet headings excluding borrowings presented separately in balance sheet liabilities

Income and expenses	31 December 2018	31 December 2017
Infrastructure fees	3,409	3,568
Expenses	-556	-565

#### 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;
- Management of the Group's real estate and property;
- Organisation of the Group's general purchases.

Balance sheet headings	31 December 2018	31 December 2017
Receivables	57	80
Payables	90	62

Income and expenses	31 December 2018	31 December 2017
Income	74	74
Expenses	-517	-503

### 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 2018	31 December 2017
Grants receivable (assets)	350	409

Income and expenses	31 December 2018	31 December 2017
Access fees	1,832	1,820
Freight compensation	54	62

## 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

## 05 – Financial statements

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/floating-rate/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:

I - FINANCIAL INSTRUMENT FUTURES MARKET	31 December 2018			31 December 2017	
	Nominal	MtM		Nominal	MtM
Over-the-counter hedging transactions:					
EUR swaps:					
Micro-hedge				-	
< 1 year	116 EUR	-4 EUR		- EUR	- EUR
1 to 5 years	1,891 EUR	57 EUR		622 EUR	-17 EUR
> 5 years	2,553 EUR	-450 EUR		3,782 EUR	-390 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	-3 EUR

II - FOREIGN CURRENCY TRANSACTIONS	31 December 2018			31 December 2017	
	Nominal	MtM		Nominal	MtM
Over-the-counter hedging transactions:					
EUR forward contracts:					
< 1 year	126 AUD	-1 EUR		- AUD	- EUR
	305 GBP	-3 EUR		- GBP	- EUR
< 1 year	1,597 USD	50 EUR		1,943 USD	-51 EUR
1 to 5 years					
> 5 years					
EUR currency swaps:					
< 1 year	690 CHF	173 EUR		100 CHF	18 EUR
	5,000 JPY	2 EUR		- JPY	- EUR
	1,000 USD	-24 EUR		- USD	- EUR
1 to 5 years	300 CHF	90 EUR		990 CHF	256 EUR
	800 GBP	-282 EUR		800 GBP	-248 EUR
	27,000 JPY	23 EUR		32,000 JPY	4 EUR
	1,500 USD	21 EUR		2,500 USD	-100 EUR
> 5 years	90 AUD	-7 EUR		90 AUD	-5 EUR
	277 CAD	34 EUR		277 CAD	39 EUR
	855 CHF	251 EUR		855 CHF	238 EUR
	2,815 GBP	-1,137 EUR		2,805 GBP	-923 EUR
	937 HKD	-6 EUR		937 HKD	-10 EUR
	23,000 JPY	-3 EUR		23,000 JPY	-18 EUR
	500 NOK	-8 EUR		500 NOK	-7 EUR
	2,290 SEK	-7 EUR		2,290 SEK	-11 EUR
	120 USD	6 EUR		120 USD	4 EUR

III - OTHER OFF-BALANCE SHEET COMMITMENTS	31 December 2018		31 December 2017	
Financing commitments received:				
Syndicated loan:		1,500 EUR		1,500 EUR

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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 2018.

## 8.2. OTHER COMMITMENTS GIVEN AND RECEIVED

- Guarantees received from external third parties

Financial guarantees received from third parties amounted to €551 million and break down as follows:

- Guarantees received from suppliers (€521 million)
- Guarantees received from customers (€29 million)

- Purchase commitments

Purchase commitments mainly involve fixed asset purchase commitments in the amount of €56 million as at 31 December 2018.

- Financial guarantees given to third parties

Financial guarantees given to third parties amounted to €760 million as at 31 December 2018.

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 €3 million as at 31 December 2018.

This mainly involves guarantees given for €1 million to the SNCF corporate foundation, €1 million to VOSSLOH in connection with the Southern Europe Atlantic (SEA) high-speed line construction project and €1 million to TSO.

### Finance and operating leases

Lease commitments totalled €484 million as at 31 December 2018 and break down as follows:

- Transport equipment operating lease: €40 million
- Operating lease - rail equipment: €154 million
- Real estate operating lease: €279 million
- Equipment operating lease: €10 million

- Sales undertakings

Sales undertakings received amounted to €44 million as at 31 December 2018.

Sales undertakings given amounted to €44 million as at 31 December 2018.

- Commitments received on property operating leases

The indexation adopted as at 31 December 2018 for future concession payments was 1.93% (ILAT index June 2018/June 2017).

As at 31 December 2018, total commitments received under operating leases was estimated at €545 million.

- Property leases given

The indexation adopted as at 31 December 2018 for future concession payments was 1.93% (ILAT index June 2018/June 2017).

As at 31 December 2017, total commitments given under operating leases was estimated at €279 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 €551 million.

SNCF Réseau receives financial guarantees from third parties, in particular a first-demand guarantee from a banking institution in the amount of €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 €122 million.

- Track reservation

The Document de Référence du Réseau for 2018, 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 2018.

### 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.

## 05 – Financial statements

### 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 2018	31 December 2017
Executives	15,120	14,300
Supervisors	21,012	21,044
Labourers	21,308	22,400
<b>Total average number of paid employees</b>	<b>57,439</b>	<b>57,744</b>

### 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 December 2018	31 December 2017
<b>Member of management bodies</b>	-	
Loans and advances	-	0
Allocated compensation	4	3
Pension commitments	-	0
<b>Total</b>	<b>4</b>	<b>3</b>

The stated amounts correspond to gross compensation.



# 06 – STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

Statutory auditors' report

**SNCF Réseau**

**Statutory Auditors' report  
on the consolidated financial statements**

**(For the year ended 31 December 2018)**

**Statutory Auditors' report  
on the consolidated financial statements**

**(For the year ended 31 December 2018)**

**SNCF Réseau**

15-17 rue Jean-Philippe Rameau  
93418 La Plaine Saint-Denis, France

*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.*

**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 2018.

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 at 31 December 2018 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 impairment testing of infrastructure CGU assets, the Company considered that the adoption on 14 June 2018 of the Law for a New Railway Pact (*loi d'habilitation pour un nouveau pacte ferroviaire*), in addition to various declarations of the French government concerning primarily a change in the methods for indexing infrastructure fees, constituted new indications of impairment. The Company therefore carried out an additional impairment test during the year, using the same methods that were used at 31 December 2017, and recognised an impairment loss of €3.4 billion, in addition to the €9.6 billion impairment loss recognised in 2015 to take into account the new balance in the negotiations between the Company and the French State. The new balance in the negotiations is based on the assumption that (i) the Company will achieve its productivity goals and (ii) the State will effectively implement all means and commitments necessary to support the recoverable amounts of the assets as determined above.

The cash flow projections used for the test comprise (i) cash inflows (infrastructure fees, access charges and investment subsidies) mainly arising from commitments received from the French State, and (ii) expenses (installation work and maintenance), capital investment in renovations and renewals, and productivity gains.

- 2030 was maintained by the Company as the standard final year for the railway network currently in service, considering that 2030 will correspond to the year in which the network will be stabilised at expected performance levels, although these levels have never been attained. Terminal value represents the essential factor in measuring value in use.
- The cash flow projections used to justify these assets' values are based on the assumption that the Company will meet its productivity goals, which are even more ambitious than those used in previous years.
- Projections for infrastructure fees in the regulated market have been left unchanged from the previous year-end, at a higher level than for open access operations despite the non-compliance opinion issued by the French road and rail office (ARAFER) in February 2019 regarding the 2020 National Rail Network Statement, as the Company considers that the draft legislation currently under review by the French Council of State (*Conseil d'Etat*) will enable it to continue to apply a different indexation to open access.
- The investment subsidies allocated to renovation work – which are mainly financed by dividends earned by SNCF that is redistributed by the French State to SNCF Réseau – are based on a new financial trajectory for the Groupe Public Ferroviaire which does not include the possible consequences of future legal and tax restructuring. The investment subsidies arising from the aforementioned trajectory have not obtained a formal commitment from the French State.
- Lastly, the cash flow projections used are based on a new financial trajectory for SNCF Réseau that should be integrated in an amendment to the performance contract signed in April 2017, covering the residual period 2018-2026. The financial trajectory was presented for information purposes only to the SNCF Réseau Board of Directors on 25 July 2018 (without being formally approved).

There are major risks and uncertainties involved in the discounted future cash flow assumptions used to measure the property, plant and equipment, intangible assets and deferred tax assets presented in

the statement of financial position at 31 December 2018. Consequently, the amount of the related impairment loss could increase significantly, for the following reasons.

For these reasons, we are unable to assess the pertinence of the projections and are therefore unable to express an opinion on the net value of the assets concerned, which amounted to €32.7 billion in the statement of financial position at 31 December 2018 after impairment for property, plant and equipment and intangible assets and €2.8 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 these 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 2018 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 matters described in the “Basis of the qualified audit opinion” section of our report, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant 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 €913 million at 31 December 2018. 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 6.4 to the consolidated financial statements, these obligations are mainly evaluated using the unit credit method incorporating assumptions as to the discount rate, life expectancy, the staff turnover rate and projected future salary increases.

For employees with SNCF qualifying status, since the creation of the SNCF employee pension and provident fund (*Caisse autonome de Prévoyance et de Retraite du Personnel de SNCF*), 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.

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:
  - o the accounting treatment of new plans, as either defined-benefit plans or defined-contribution plans,
  - o 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;
- 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 outcome of the appeal and the sensitivity of the value of the obligations to the assumptions applied.

### **How our audit addressed this risk**

### **Specific verifications**

As required by legal and regulatory provisions and in accordance with professional standards applicable in France, we have also verified the information pertaining to the Group presented in the Board of Directors' management report.

With the exception of the potential impact of the matters set out in the “Basis of the qualified audit opinion” section of our 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, Finance and Industry on 22 April 1998 for PricewaterhouseCoopers Audit and by the French Minister for the Economy, Industry and Digital Affairs on 27 April 2015 for Ernst & Young Audit.

At 31 December 2018, PricewaterhouseCoopers Audit and Ernst & Young Audit were in the twenty-second and fourth consecutive year of their engagement, respectively.

### **Responsibilities of management and those charged with governance for the consolidated financial statements**

Management is responsible for preparing consolidated financial statements giving 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 that are 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 taken by users 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 the Company's management.

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 in the consolidated financial statements, whether due to fraud or error, design and perform audit procedures in response 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 the internal control procedures 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 Group to express an opinion on the consolidated financial statements. The Statutory Auditors are responsible for the management, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed thereon.

*Report to the Audit, Accounts and Risk Committee*

We submit a report to the Audit, Accounts and Risk Committee which includes, in particular, a description of the scope of the audit and the audit programme 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 the most significant for 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, 28 February 2019

The Statutory Auditors

PricewaterhouseCoopers Audit

ERNST & YOUNG Audit

Philippe Vincent

Christine Vitrac

Denis Thibon

# 07 – STATUTORY AUDITORS’ REPORT ON THE STATUTORY FINANCIAL STATEMENTS

Statutory auditors’ report

**SNCF Réseau**

**Statutory Auditors' report  
on the financial statements**

**(For the year ended 31 December 2018)**

**Statutory Auditors' report  
on the financial statements**

**(For the year ended 31 December 2018)**

**SNCF Réseau**

15-17 rue Jean-Philippe Rameau  
93418 La Plaine Saint-Denis, France

*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.*

**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 2018.

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 2018 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 impairment testing of infrastructure CGU assets, the Company considered that the adoption on 14 June 2018 of the Law for a New Railway Pact (*loi d'habilitation pour un nouveau pacte ferroviaire*), in addition to various declarations of the French government concerning primarily a change in the methods for indexing infrastructure fees, constituted new indications of impairment. The Company therefore carried out an additional impairment test during the year, using the same methods that were used at 31 December 2017, and recognised an impairment loss of €3.4 billion, in addition to the €9.6 billion impairment loss recognised in 2015 to take into account the new balance in the negotiations between the Company and the French State. The new balance in the negotiations is based on the assumption that (i) the Company will achieve its productivity goals and (ii) the State will effectively implement all means and commitments necessary to support the recoverable amounts of the assets as determined above.

The cash flow projections used for the test comprise (i) cash inflows (infrastructure fees, access charges and investment subsidies) mainly arising from commitments received from the French State, and (ii) expenses (installation work and maintenance), capital investment in renovations and renewals, and productivity gains:

- 2030 was maintained by the Company as the standard final year for the railway network currently in service, considering that 2030 will correspond to the year in which the network will be stabilised at expected performance levels, although these levels have never been attained. Terminal value represents the essential factor in measuring value in use.
- The cash flow projections used to justify these assets' values are based on the assumption that the Company will meet its productivity goals, which are even more ambitious than those used in previous years.
- Projections for contractual infrastructure fees have been left unchanged from the previous year-end, at a higher level than for TGV and Rail Freight operations despite the opinion issued by the French road and rail office (ARAFER) in February 2019 regarding the 2020 National Rail Network Statement, as the Company considers that the draft legislation currently under review by the French Council of State (*Conseil d'Etat*) will enable it to continue to apply a different indexation to TGV and Rail Freight.
- The investment subsidies allocated to renovation work – which are mainly financed by dividends earned by SNCF that is redistributed by the French State to SNCF Réseau – are based on a new financial trajectory for the Groupe Public Ferroviaire which does not include the possible consequences of future legal and tax restructuring. The investment subsidies arising from the aforementioned trajectory have not obtained a formal commitment from the French State.
- Lastly, the cash flow projections used are based on a new financial trajectory for SNCF Réseau that should be integrated in an amendment to the performance contract signed in April 2017, covering the residual period 2018-2026. The financial trajectory was presented for information purposes only to the SNCF Réseau Board of Directors on 25 July 2018 (without being formally approved).

There are major risks and uncertainties involved in the discounted future cash flow assumptions used to measure the property, plant and equipment, intangible assets presented in the statement of

financial position at 31 December 2018. Consequently, the amount of the related impairment loss could increase significantly, for the following reasons.

For these reasons outlined above, we are unable to assess the pertinence of the projections and are therefore unable to express an opinion on the net value of the assets concerned, which amounted to €32.7 billion in the statement of financial position at 31 December 2018 after impairment for property, plant and equipment and intangible 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 these 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 2018 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by 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 audit opinion” section of our report, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant 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 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 €913 million at 31 December 2018. 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 using the unit credit method incorporating assumptions as to the discount rate, life expectancy, the staff turnover rate and projected future salary increases.

For employees with SNCF qualifying status, since the creation of the SNCF employee pension and provident fund (*Caisse autonome de Prévoyance et de Retraite du Personnel de SNCF*), 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 Company 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.

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:
  - o the accounting treatment of new plans, as either defined-benefit plans or defined-contribution plans,
  - o 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;
- 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 and the description of the outcome of the appeal.

**How our audit addressed this risk**

## **Specific verifications**

In accordance with professional standards applicable in France, we have also performed the specific verifications required by French legal and regulatory provisions.

### ***Information given in the management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements***

With the exception of the potential impact of the matters set out in the "Basis of the qualified audit opinion" section of our report, we have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements.

We attest to the fair presentation and the consistency with the financial statements of the information given with respect to the payment terms referred to in article D.441-4 of the French Commercial Code.

### ***Other information***

In accordance with French law, we have verified that the required information concerning the acquisition of investments and controlling interests and the identity of the shareholders has been properly disclosed in the management report.

## **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, Finance and Industry on 22 April 1998 for PricewaterhouseCoopers Audit and by the French Minister for the Economy, Industry and Digital Affairs on 27 April 2015 for Ernst & Young Audit.

At 31 December 2018, PricewaterhouseCoopers Audit and Ernst & Young Audit were in the twenty-second and fourth consecutive year of their engagement, respectively.

## **Responsibilities of management and those charged with governance for the financial statements**

Management is responsible for preparing financial statements giving 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 that are 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 taken by users 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 the Company's management.

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 in the financial statements, whether due to fraud or error, design and perform audit procedures in response 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 the internal control procedures 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, Accounts and Risk Committee*

We submit a report to the Audit, Accounts and Risk Committee which includes, in particular, a description of the scope of the audit and the audit programme 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 the most significant for 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, 28 February 2019

The Statutory Auditors

PricewaterhouseCoopers Audit

ERNST & YOUNG Audit

Philippe Vincent

Christine Vitrac

Denis Thibon

# 08 – STATUTORY AUDITORS’ REPORT ON CSR INFORMATION

Statutory auditors’ report

SNCF Réseau

**Report of one of the Statutory Auditors, designated independent third party, on the consolidated non-financial performance report included in SNCF Réseau's management report**

**Financial year ended December 31, 2018**

**Report of one of the Statutory Auditors, designated independent third party, on the consolidated non-financial performance report included in SNCF Réseau's management report**

**Financial year ended December 31, 2018**

In our capacity as Statutory Auditor of the SNCF Réseau Public Industrial and Commercial Establishment (hereinafter "the entity" or "SNCF Réseau") designated independent third party organization, accredited by COFRAC under number 3-1060 rev.2 (scope of accreditation available on the website [www.cofrac.fr](http://www.cofrac.fr)), we present to you our report on the consolidated non-financial performance report for the year ended December 31, 2018 (hereinafter the "Declaration"), that SNCF Réseau has chosen to present in its management report, with reference to the provisions of Articles L.225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code.

### **Entity's responsibility**

It is the responsibility of the Board of Directors of SNCF Réseau to draw up a Declaration which, as part of the entity's voluntary approach, includes a presentation of the business model, a description of the main non-financial risks, a presentation of the policies applied against these risks and the results of these policies, including key performance indicators.

The Declaration has been established by applying the procedures of the entity (hereinafter referred to as the "Guidelines"), the significant elements of which are presented in the Declaration and available on request from the Sustainable Development Department of SNCF Réseau.

### **Independence and quality control**

Our independence is defined by the provisions of Article L. 822-11-3 of the French Commercial Code and the Code of Ethics of the profession. In addition, we have put in place a quality control system that includes documented policies and procedures to ensure compliance with the rules of ethics, professional doctrine and applicable laws and regulations.

### **Responsibility of the designated auditor OTI**

- It is our responsibility, on the basis of our work, to formulate a reasoned opinion expressing a conclusion of moderate assurance on:
- - The compliance of the Declaration with the provisions of Article R. 225-105 of the French Commercial Code;

- - The sincerity of the information provided pursuant to paragraph 3 of I and II of Article R. 225 105 of the French Commercial Code, namely the results of the policies, including key performance indicators, and the actions, relating to the main risks, hereinafter the "Information".
- On the other hand, it is not for us to pronounce on:
  - - Compliance by the entity with other legal and regulatory provisions applicable, in particular, as regards vigilance, anti-corruption and taxation plans;
  - - Conformity of products and services to applicable regulations.

### **Nature and extent of work**

- Our work described below has been carried out according to the professional doctrine of the National Company of the Auditors relating to this intervention as well as to the international standard ISAE 3000 - Assurance engagements other than audits or reviews of historical financial information.
- We conducted work enabling us to assess the conformity of the Declaration with the regulatory provisions and the sincerity of the Information:
  - We have taken cognizance of the activity of all the companies included in the scope of consolidation, the statement of the main social and environmental risks related to this activity, and its effects on respect for human rights and the fight against corruption and tax evasion, as well as the resulting policies and their results;
  - We have assessed the appropriateness of the Guidelines in terms of their relevance, completeness, reliability, neutrality and comprehensibility, taking into account, where appropriate, the best practices of the sector;
  - We have verified that the Declaration covers each category of information provided for in article L. 225 102 1 of article L. 1 in social and environmental matters, as well as respect for human rights and the fight against corruption and evasion tax;
  - We have verified that the Declaration includes an explanation of the reasons justifying the absence of the information provided by the 2nd paragraph of III of Article L. 225-102-1;
  - We have verified that the Declaration presents the business model and the main risks related to the activity of all the entities included in the scope of consolidation, including, where relevant and proportionate, the risks created. through its business relationships, products or services and policies, actions and results, including key performance indicators;
  - We have verified, when they are relevant to the main risks or the policies presented, that the Declaration presents the information provided for in Article R. 225-105 II;
  - We appreciated the process of selecting and validating the main risks;
  - We inquired about the existence of internal control and risk management procedures put in place by the entity;

- We assessed the consistency of the results and the key performance indicators selected with regard to the main risks and policies presented ;
- We have verified that the Declaration covers the consolidated scope, ie all the companies included in the scope of consolidation in accordance with Article L. 233-16 with the limits specified in the Declaration;
- We appreciated the collection process put in place by the entity to ensure the completeness and fairness of the Information;
- we have implemented for key performance indicators and other quantitative results that we considered the most important and listed in the appendix :
  - Analytical procedures to verify the correct consolidation of the collected data as well as the coherence of their evolutions ;
  - detailed tests on the basis of surveys, consisting in checking the correct application of the definitions and procedures and reconciling the data with supporting documents. This work was carried out with a selection of contributing entities, namely the Sustainable Development Department, the Safety, Security and Risk Management Department, the HR Performance Department, the Industrial and Engineering General Directorate, Purchasing Department, the Communications and Territorial Dialogue Department, the Legal Department, and the Customers and Services Division) and cover all the consolidated data of the key performance indicators and results selected for these tests ;
- we consulted the documentary sources and conducted interviews to corroborate the qualitative information (actions and results) that we considered the most important and listed in the appendix;
- we have assessed the overall consistency of the Declaration with our knowledge of all the companies included in the scope of consolidation.

We believe that the work we have done in exercising our professional judgment allows us to formulate a conclusion of moderate assurance; higher level assurance would have required more extensive audit work.

### **Means and resources**

- Our work mobilized the skills of 4 people and took place between November 2018 and February 2019 over a total duration of intervention of 3 weeks.

In order to assist us in carrying out our work, we have called on our specialists in sustainable development and social responsibility. We conducted three interviews with those responsible for the preparation of the Declaration, including the Environment and Sustainable Development Directorate.

### **Conclusion**

Based on our work, we have not identified any significant misstatement that would call into question the fact that the extra-financial performance declaration complies with the applicable regulatory provisions and that the information, taken as a whole, is presented in a sincere manner in accordance with the Repositry.

Neuilly-sur-Seine, le 28 février 2019

One of the Statutory  
Auditors PricewaterhouseCoopers Audit

Philippe Vincent  
Associate

Sylvain Lambert  
Associate of Sustainable Development  
Department

**Appendix : List of information we considered the most important***Key performance indicators and other quantitative results:*

- Number of minutes lost per 100 km by the railway companies;
- Share of train delays in minutes due to bad weather on total causes attributable to infrastructure management;
- Number of AOTs (regions and state) met at least once a year;
- Worker Accident Frequency Rate with Off Trip and Severity Rate;
- Rate of projects covered by the Information System Security Policy, Number of requests from the Data Protection Officer;
- Number of outstanding safety events attributed to SNCF Réseau;
- Number of Regional Business Continuity Plans (BCPs) completed;
- Quantities of Resources Purchased and End-of-Life Material Sales;
- Percentage of industrial sites that have regular monitoring of aqueous discharges;
- Number of establishments in the program for continuous improvement and traceability for the environment labeled Bronze;
- Number and distribution, Total number of permanent hires, average cost agent,
- Share of women in the global workforce and by college;
- Number of hours of training completed in the year;
- Number of consultations with the public (including voluntary consultations);
- Percentage of purchases made from SMEs.

*Qualitative information (actions and results):*

- Responsible purchasing;
- Security of information systems and protection of personal data;
- Securing infrastructures in the face of climate change;
- Management of resource consumption and commitment to the circular economy;
- Assessment of greenhouse gas emissions;
- Promotion of professional equality and gender diversity.