

2016
Financial and
CSR Report



Attestation of the persons responsible for the annual report

We, the undersigned, hereby attest that to the best of our knowledge the financial statements have been prepared in accordance with generally-accepted accounting principles and give a true and fair view of the assets, liabilities, financial position and results of operations of the company and of all consolidated companies, and that the management report attached here to presents a true and fair picture of the results and financial position of the company and of all consolidated companies as well as a description of the main risks and contingencies facing them.

President and CEO

Élisabeth Borne



Chief Financial Officer

Alain Le Duc



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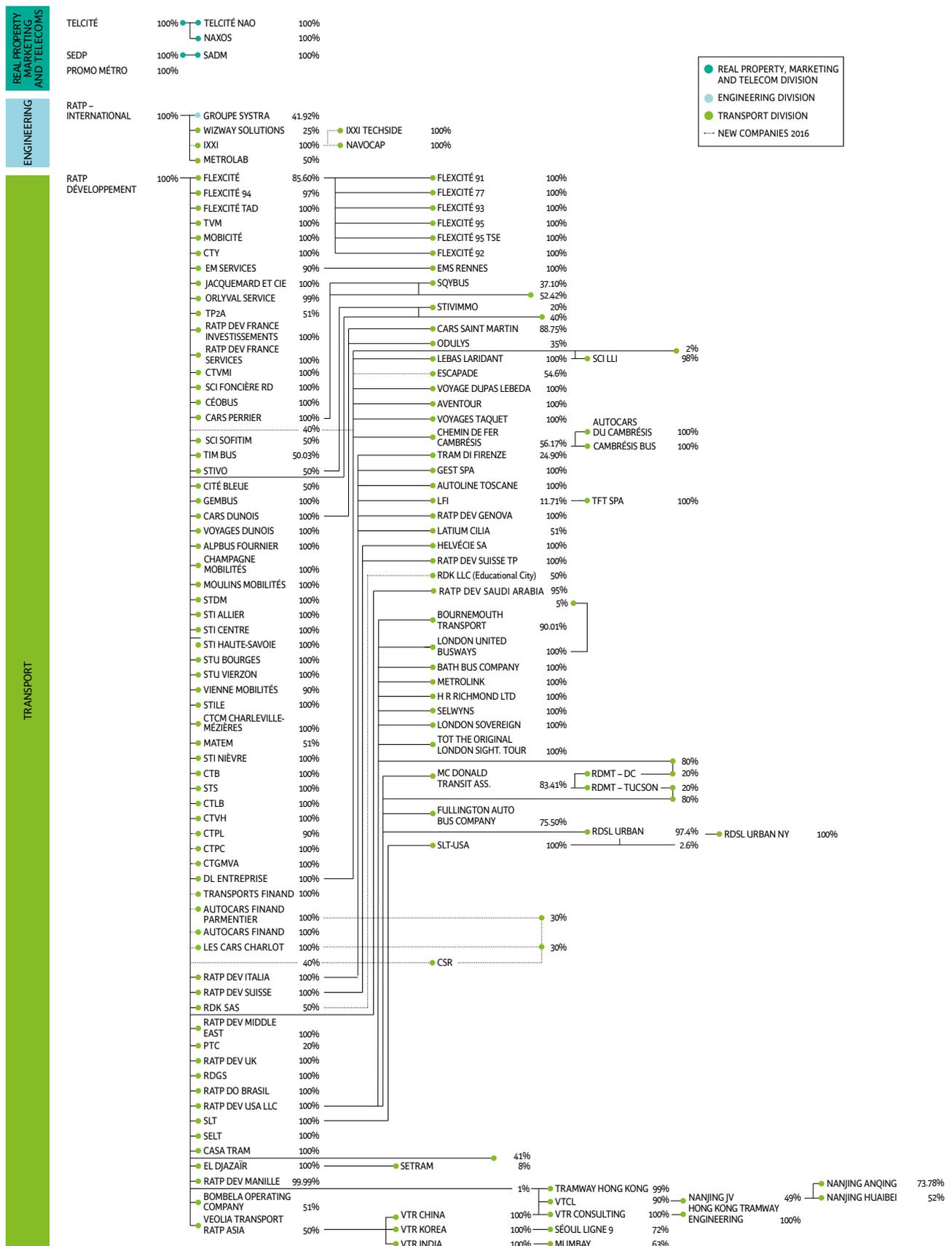
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RATP group organisation chart

31 December 2016



RATP group (“the Group”) is a major public transport provider in France, operating in towns and suburbs and particularly in the Île-de-France region. The parent company, Régie autonome des transports parisiens (RATP), is a State-owned Industrial and commercial public utility (Epic) incorporated pursuant to the French law dated 21 March, 1948. It is a legal entity under public law registered with the Paris Trade and companies register (RCS). Its head office is located at 54, quai de la Râpée, 75012 Paris. The aim of RATP is primarily to run a public transport service in Île-de-France and its purpose, fixed by law No. 2009-1503 dated 8 December, 2009 (French law on public passenger services by rail), is to manage the network infrastructure assigned to the public passenger transport services.

Income statement

1 Main trends in 2016

1.1 FOR TRANSPORT

RATP (breakdown of RATP’s parent company financial statements)

Clarification of RATP’s tax status

RATP was notified by a letter from the Minister for Finance and Public Accounts dated 3 March 2016 that, as a public institution engaged in gainful activities, it is subject to the same taxes and duties as private undertakings engaged in the same operations.

RATP is therefore subjected to corporate income tax and similar taxes (apprenticeship tax and tax on company vehicles). RATP also considers that this deadline includes being subject to payroll tax from the fiscal year beginning 1 January 2016.

In October 2016, the French tax authorities (DLF) specified the terms of taxation for corporate income tax, in particular regarding the opening tax balance sheet and the depreciation rules for fixed assets.

Prior to the entry into taxation on 1 January 2016, RATP therefore revalued on a tax-free basis the assets and liabilities forming the balance sheet at 31 December 2015 at their market value. This corresponds to the tax value of the assets in the opening balance sheet. The “tax” revaluation surplus resulting from the difference between the reassessed value and the carrying amount of the assets appearing in the opening balance sheet is monitored by a non-accounting procedure. It generates a tax depreciation thus used solely for the calculation of tax.

In the case of equipment subsidies granted to businesses by the European Union, the State, public authorities or any other public body and allocated to the creation or acquisition of fixed assets, article 42-f of the French general tax code (CGI) provides that these subsidies may be taxed as depreciation for the portion of the subsidy allocated to depreciable fixed assets and, over a period of ten years, for the portion of the subsidy allocated to non-depreciable fixed

assets. As RATP was not subject to corporate income tax at the time the subsidies were awarded before 1 January 2016, it was not in a position to opt for the optional scheme under article 42-f of the CGI. As a result, the DLF (French tax authorities) consider that the subsidies awarded to RATP before 1 January 2016 relate to pre-tax years and are therefore not taxable.

Income tax expense was therefore zero for the duration of the contract. The RATP and Île-de-France transport authority finalised their discussions in order to sign an amendment taking into account the tax status clarification (income tax and payroll tax).

In terms of consolidation, the opening balance sheet generates deferred tax assets over a long period, recognised in opening equity for the amount of €537 million. Discounting of receivables for 2016 generates a net tax expense of €22 million.

RATP’s financial position

RATP’s revenue decreased by 1.7% compared to 2015, taking into account in particular the loss of €100 million following the 2016-2020 agreement between the Île-de-France transport authority and RATP. The increase in the service offer represents €10 million, or +0.2%. The index used to revise the RATP compensation (Île-de-France transport authority index) was null.

In addition to the loss and with the impact of payroll tax, the apprenticeship tax and French tax credit on payroll costs (CICE), EBITDA fell by €118 million.

Likewise, operating income fell by €144 million taking into account, primarily, in addition to EBITDA, the change in net allocations to provisions and depreciation (–€40 million).

Recurring net income was €134 million in 2016, compared with €347 million in 2015, representing a decrease of €213 million. Although it benefited from a fall in financial expenses (+€9 million) as a result of lower long-term rates and reversed average outstanding net debt, it was impacted by exceptional depreciation (–€63 million) and the drop in net allocations to provisions and depreciation (–€40 million).

Given the impact of non-recurring items in 2016 (compensation paid to suppliers –€8 million) and in 2015 (Logis-Transports partial asset contribution of €31 million, Voltaire disposal for €9 million, Nogent disposal for €12 million, extraordinary payment to the Île-de-France transport authority to end the 2012-2015 agreement (–€40 million), additional profit sharing payments for 2015 (–€10 million including social contribution)), the net income for 2016 was €141 million, down €214 million.

Recurring cash flow was €867 million in 2016, compared to €968 million in 2015, representing a decrease of €100 million. Given the impact of non-recurring items in 2015 and 2016 (compensation paid to suppliers, payments to the Île-de-France transport authority, additional profit-sharing payments), it amounted to €875 million in 2016, compared to €924 million in 2015, down €49 million.

OTHER DEVELOPMENTS IN FRANCE

Business activity increased compared to 2015 thanks to the following:

- the full-year effect of the acquisition in August 2015 of the Dupas Lebeda Group, which pursues inter-urban, educational and tourism activities in the Hauts-de-France region;
- the operation of the Laon transport network (Hauts-de-France, seven-year contract);
- acquisition of the “Finand” group at the end of September 2016, to complete the Group’s network in the “Hauts-de-France” region;
- the maintenance contract for the escalators in the Toulouse metro (Tisséo);
- operation of the Mouvéo network (Champagne region) for eight years;
- operation of the express bus line between Paris and Châlons – Vatry airport, the leading airport in the Champagne Ardennes region;
- the Group’s overhaul of transport for persons with reduced mobility in Val-d’Oise, as well as the renewed confidence provided by La Roche-sur-Yon. However, the transport for persons with reduced mobility in Val-de-Marne will not be renewed at the end of Q1 2017; a tight budget environment is still causing certain local authorities to reduce their service offering;
- the French “City Sightseeing” business has, like London, been impacted by the drop in tourism numbers following the attacks in November 2015 and poor weather at the start of the season;
- the acquisition in July 2016 of Navocap, based near Toulouse, France’s second largest supplier specialising in operating support and traveler information systems, enabled lxxi to consolidate its product offer and enter the Mexican market by acquiring Setim, which specifically provides consultancy services for ITS (Intelligent transport systems) solutions. This second operation, which was completed at the end of the year, had no impact on the financial statements (integration is effective from January 1 2017).

OTHER DEVELOPMENTS OUTSIDE FRANCE

A period dedicated to strengthening existing positions and marked by unfavorable currency trends:

- in the USA, the Washington DC tramway was opened on 27 February 2016. The Group will operate the network of eight stations for five years;

- in Italy, the Tuscany contract awarded to RATP Dev in March 2016 was canceled by the Administrative Court of Tuscany last October due to non-compliant financial bids from both bidders. While we await a new solution to be filed by Mobit (the exiting operator) and RATP Dev, the transition costs incurred and capitalised have been paid. The region has restarted the allocation process and has asked both bidders to return compliant financial bids on 28 February, 2017;
- in England, revenue was adversely impacted by the currency translation effect, which was amplified following Brexit. However, Brexit had no other impact in the short term over the activities of RATP Dev, which are largely free-standing. TFGM, Manchester’s transport authority, did not renew Metrolink; the tram network operating contract ends in July 2017;
- from a commercial point of view, 2016 was particularly dense in terms of bus, tramway and metro modes, with structural calls for tenders such as the renewal and extension of the Casablanca tramway, the call for tenders for the commissioning and operation of the future Riyadh metro, as well as that of Doha and the tramway network of Lusail in Qatar. In France, RATP Dev submitted a bid for the Caen La Mer network. Finally, as of 2017, RATP Dev will be operating the Kiceo network in Vannes.

1.2 ENGINEERING

The Systra group reported business activity of €612 million, down 1.90% compared to 2015, primarily in relation to the expected decrease in TGV’s activity in France. The fall in activity is offset by the external growth operations in Sweden, Australia and the UK.

Entries in the business portfolio are less dynamic, given the unstable economic environment which is at times directly linked to the difficulties experienced in the first half by a certain number of oil-producing countries, resulting in the postponement or cancellation of consultations. €541 million of entries were reported in 2016, compared to €609 million in 2015.

In this respect, we note entries for orders for the Dubai tramway, the TER in Dakar, line 3 of the Mumbai metro, the signing of an amendment for phase 4 of the “Expo-route 2020” metro in Dubai and, in France, additional orders in relation to the Nîmes-Montpellier bypass (CNM). Systra’s order book accounted for €925 million at the end of 2016.

Systra’s contribution to the Group’s net income is €11.4 million (compared to €14.3 million in 2015). Targets have been achieved despite a difficult context in 2016 (low oil prices, negative change, tension and global economic uncertainty).

1.3 REAL PROPERTY, MARKETING & TELECOMS

Business is growing for this division. Despite the negative economic context, subsidiaries involved in real estate and telecommunications recorded a slight growth.

2 Consolidated results at the end of 2016

The consolidated results are reflected in the following financial indicators:

- revenue fell by 2% compared to 2015, down 2.1% for RATP and 1.5% for the subsidiaries;
- operating income of €382 million represents a decrease of €247 million compared to 2015. In 2015, two operations were recorded which established a remeasurement of assets without entry of financial resources for the Group. In 2015, the Group therefore recorded non-recurring operations for a global amount of €38.6 million. In 2016, non-recurring operations only accounted for €7.6 million. Excluding these non-recurring items, operating income fell by €216.8 million, mainly due to the entry into force of a new contract linking RATP and the Île-de-France transport authority, and the concurrent standardisation of tax policy;
- the net income attributable to owners of the company, which totals €171 million, has fallen by €266 million compared to 2015; this is mainly linked to the above-mentioned issues and the income tax expense for RATP;
- equity increased by €630.2 million compared to 2015, due to retained earnings minus actuarial gains and losses and conversions and add-ons resulting from the recognition of IDAs linked to the opening balance sheet;
- and net debt, which increased by €161 million from 2015.

Group capital expenditure (before grants) amounted to €1,851 million and remained at a high level. More than 60% of the budget was devoted to the network and the rolling stock maintenance and modernisation program. The rest of the budget was used to increase transport capacity.

Finally, the following data on RATP's contribution include the research and development costs incurred by Metrolab in connection with the "metro of the future".

2.1 CONSOLIDATED REVENUE

In millions of euros	31/12/2015	31/12/2016	Change	In %
TRANSPORT	5,508.4	5,399.1	(109.2)	(2.0)
RATP (a)	4,392.0	4,301.5	(90.5)	(2.1)
RATP Développement, RATPI and Ixxi	1,116.4	1,097.7	(18.7)	(1.7)
VALUATION OF REAL PROPERTY, MARKETING & TELECOMS	47.9	48.6	0.7	1.4
RATP (a): management mandate Promo	21.4	20.5	(0.9)	(4.3)
Promo Métro	0.1	0.2	0.0	35.4
Telecommunications	25.0	25.9	0.9	3.8
Real property	1.4	2.0	0.6	38.6
RATP group (b)	5,556.3	5,447.8	(108.6)	(2.0)
Contribution of subsidiaries (b – a)	1,142.8	1,125.8	(18.0)	(1.6)
Contribution of subsidiaries in %	20.6	20.7		

The Group revenue recorded a drop of €108.6 million (–2%), attributable to RATP. The decrease in the parent company's business is due to the entry into force of the new contract with the Île-de-France transport authority and the slight drop in the updated level of contributions made by them.

The period is marked by a global negative change in currencies of €64 million. It accounts for exactly the same corresponding value of the positive effect recorded in 2015. It conceals the actual growth of the subsidiaries excluding the currency translation effect of €46.7 million.

This growth is first of all based on the effect of the acquired businesses. Among the most significant is, in France, the full-year effects of the acquisition of 100% of the shares in the tourism business Open Tour Paris and the Dupas Lebeda group and, in 2016, those of Finand and Navocap.

The increased revenue from transport subsidiaries is also based on operations since 1 January 2017 (Épernay, Laon, the express bus line between Paris and Châlons – Vatry airport and the maintenance contract for escalators on the Toulouse metro).

The contracts in portfolio, particularly abroad, also provide a good basis for growth, particularly in the United States and Algeria.

The companies in the Real Property, Marketing & Telecoms division recorded a slight increase in revenue.

2.2 OPERATING INCOME (EBIT)

In millions of euros	31/12/2015	31/12/2016	Change
TRANSPORT	613.6	368.0	(245.6)
RATP (a)	549.7	347.3	(202.4)
RATP Développement, RATPI and Ixxi	63.9	20.8	(43.2)
ENGINEERING (Systra group)	6.0	4.7	(1.2)
VALUATION OF REAL PROPERTY, MARKETING & TELECOMS	9.4	9.3	(0.1)
Promo Métro	1.2	1.3	0.1
Telecommunications	7.8	7.5	(0.3)
Real property	0.4	0.5	0.1
RATP group (b)	629.0	382.1	(246.9)
Contribution of subsidiaries (b – a)	79.3	34.8	(44.5)

Operating income fell by €246.9 million, comprised of €202.4 million from RATP and €44.5 million from its subsidiaries. For RATP, the change is due to the new contractual framework (rescaling of contributions and payroll tax for RATP). The residual variation on RATP is the result of the negative change in expenses calculated (IFRS restatement of employee benefits).

With regards to the transport subsidiaries, the change in operating profitability is analysed, excluding the technical effect observed in 2015 during the takeover of Open Tour Paris, in the amount of €39.4 million. This shows a decline compared to 2015, with contrasting positions depending on the geographical area.

For transport, French activities performed well and the profitability of contracts in the UK and the USA increased. However, the intensification and complexity of responses to calls for tender as well as the consequences of the fall in tourist numbers and unfavorable weather conditions had an impact on operating profitability:

- the Tuscany costs and the Metrolink, Doha, Riyadh, Caen and Casablanca costs occurred within a short time frame in 2016;
- the capitalised Tuscany transition costs were paid at the end of 2016;
- the Sightseeing business suffered from a fall in foreign tourism in London and Paris and increased competition. In Paris, this was combined with poor weather conditions and the effect of the Euro 2016.

Systra is accounted for using the equity method, with 2016 representing a drop in the contributed net income.

Despite the economic context and the periods of work that interrupt the sale of spaces on RATP's railway network, the profitability of Promo Métro and telecoms remained quite stable.

2.3 CONSOLIDATED NET INCOME ATTRIBUTABLE TO OWNERS OF THE COMPANY

In millions of euros	31/12/2015	31/12/2016	Change
TRANSPORT	424.7	159.6	(265.1)
RATP (a)	378.8	163.2	(215.6)
RATP Développement, RATPI and Ixxi	45.9	(3.6)	(49.5)
ENGINEERING (Systra group)	6.0	4.7	(1.2)
VALUATION OF REAL PROPERTY, MARKETING & TELECOMS	6.6	6.7	0.1
Promo Métro	0.8	1.0	0.1
Telecommunications	5.4	5.3	(0.1)
Real property	0.3	0.4	0.1
RATP group (b)	437.3	171.0	(266.2)
Contribution of subsidiaries (b – a)	58.5	7.8	(50.7)

Net income attributable to the Group amounted to €171 million at year-end 2016, compared to €437.3 million at year-end 2015, down €266.2 million. Non-recurring and cyclical items strongly influenced net income, as follows:

	2015	2016
TOTAL NET INCOME ATTRIBUTABLE TO OWNERS OF THE COMPANY	€437.3 million	€171.0 million
Non-recurring items	+38.6	+7.6
Changes in IFRS provisions	+43.8	(20.7)
Net income attributable to owners of the company, excluding recurring IFRS	€354.9 million	€184.1 million

RATP's contribution fell by €257 million between 2015 and 2016, due to the application of the new Île-de-France transport authority agreement which includes the standardisation of RATP's tax policy.

The subsidiaries' contribution stood at €9.5 million at the end of 2016, down €48.9 million. Excluding the aforementioned gains, the subsidiaries' contribution decreased by €13.0 million at year-end 2016. The Transport division accounts for €11.8 million and Engineering for €1.2 million of this decline.

The contributing data take into account the cancellation of the write-off of RATP's debts to RATPi for the sum of €6 million under the Metrolab research program.

2.4 CONSOLIDATED EQUITY

The change in consolidated equity attributable to owners of the company between year-end 2015 and year-end 2016 is analysed as follows:

In millions of euros	31/12/2015	31/12/2016	Change
TRANSPORT	3,601.2	4,233.0	631.8
RATP (a)	3,534.7	4,184.2	649.6
RATP Développement, RATPI and Ixxi	66.5	48.8	(17.8)
ENGINEERING (Systra group)	45.7	44.1	(1.6)
VALUATION OF REAL PROPERTY, MARKETING AND TELECOMS	27.9	27.9	0.0
Promo Métro	0.8	0.9	0.1
Telecommunications	24.7	24.5	(0.1)
Real property	2.3	2.4	0.1
RATP group (b)	3,674.7	4,305.0	630.2
Contribution of subsidiaries (b – a)	140.1	120.7	(19.4)

Consolidated equity increased by €630.2 million, from €3,674.7 million to €4,305 million. RATP accounted for a €649.6 million increase and the subsidiaries accounted for a loss of €19.4 million.

RATP's equity was mainly affected by:

- net income;
- the decrease in the discount rate on employee benefits;
- the offsetting of the recognition of IDAs for €537 million following tax savings generated by the opening balance sheet.

For the subsidiaries, significant items included:

- a decrease of €10 million in the Transport division mainly due to the foreign currency translation differences on British assets;
- the Systra group, a decrease of €1.6 million;
- the Real property, Marketing and Telecoms subsidiaries remain stable after the distribution of dividends.

2.5 CONSOLIDATED NET DEBT

Changes in consolidated net debt between 2015 and 2016 were as follows:

	In millions of euros	31/12/2015	31/12/2016	Change
				12/2016-12/2015
Net corporate debt		5,181.9	5,383.0	201.1
RATP leases and miscellaneous		(1.1)	(17.4)	(16.3)
Effect of IAS 39		(59.1)	(59.8)	(0.7)
Net debt Epic RATP (incl. lease)		5,121.7	5,305.8	184.1
Net debt of transportation subsidiaries		185.3	164.6	(20.7)
<i>Net debt – Transportation</i>		<i>5,307.0</i>	<i>5,470.3</i>	<i>163.4</i>
<i>Net debt – Engineering</i>		<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Net debt – Valuation of real property, marketing and telecoms</i>		<i>(28.8)</i>	<i>(31.3)</i>	<i>(2.5)</i>
RATP GROUP CONSOLIDATED NET DEBT		5,278.2	5,439.1	160.9
Net debt of subsidiaries		156.5	133.2	(23.2)

Consolidated net debt increased by €160.9 million between 31 December 2015 and 31 December 2016. RATP is responsible for the increase.

2.6 CAPITAL EXPENDITURE

RATP group's capital expenditure amounted to €1,851 million (excluding acquisitions).

RATP's contribution amounted to €1,784 million, of which:

- €743 million to increase transport capacity (compared with €494 million in 2015);
- €1,042 million for modernisation and maintenance (compared with €1,337 million in 2015).

The Group invested €743 million to increase transport capacity. We highlight the following:

- capital expenditure of €535 million for infrastructure works under the State and regional contractual plan, an increase of 49% compared to 2015. 2016 saw good progress in the projects launched, in particular those relating to the extension of line 14 up to Saint-Ouen town hall and 11 Rosny Bois-Perrier, which account for two – thirds of the spending under this master plan;
- €208 million was invested in rolling stock linked to operations to increase transport capacity: continuation of the program to acquire 10 MI09s in order to improve the service on RER line A, delivery of MF01s and increase in the purchasing project for the MP14 for the extension of the line to the Saint-Ouen town hall.

€1,042 million invested in the modernisation and maintenance of the infrastructure and rolling stock (excluding rolling stock linked to operations to improve services):

- €743 million of expenditure linked to modernisation and maintenance, which is a record level for the second year running, with a significant weighting towards investment in transport systems;
- €299 million of expenditure linked to rolling stock, a sharp decrease compared to 2015 due to the completion of the acquisition programs for new railway stock (MI09 for line A and MF01 for line 9).

3 Outlook

In a business sector which is relatively stable, the Group will continue implementing plans to develop and improve productivity in order to boost economic performance, and will consolidate businesses which have been recently integrated. The follow-up on the second consultation on the Tuscany file will impact on RATP Dev's short-term growth. RATP will continue its ambitious capital expenditure program (2016-2020) and Group debt will stabilise in 2017, following the expected increase in the first year of the 2016-2020 contract.



4 Risk management

4.1 COMPANY OBJECTIVES AND POLICY IN TERMS OF FINANCIAL RISK MANAGEMENT

RATP uses all available financial instruments to optimise the cost of debt and hedge its exposure to changes in interest rates, exchange rates and commodity prices, while applying strict management rules and complying with hedge accounting criteria:

- RATP systematically hedges all exchange rate risk on its foreign currency debt or deposits using cross currency swaps;
- RATP regularly hedges its exposure to interest rate movements on future bond issues using swaps and swaption collars;
- RATP uses all interest rate instruments (swaps, caps, floors and swaptions) to optimise its financial expense, while complying with the microhedging rules set forth by French accounting principles:
 - all interest rate derivative instruments are matched to a specific underlying financial liability, with a shorter or equal maturity to the underlying,
 - RATP backs fixed-rate financial liabilities with interest rate swaps to receive a fixed rate and pay a floating rate indexed to euro yield curves;
- RATP may cover its exposure to commodity price movements by using financial instruments indexed exactly to the physical delivery terms agreed with suppliers.

RATP uses a commercial paper facility of €2,500 million to manage cash and liquidity exposure. It invests surplus cash on a daily basis in funds that comply with IFRS 7 criteria for classification as “cash equivalents”.

Counterparty risk is limited through the systematic use of guarantee clauses in all framework agreements related to financial instruments.

4.2 COMPANY POLICY ON RISK CONTROL AND THE INTERNAL CONTROL SYSTEM

The President’s report on the preparation and organisation of the work of the Board of Directors and on the internal control procedures reports, in section I, on the governance principles in place at RATP. The risk management and internal control systems are presented in section II of the report.

5 Other

5.1 CONSOLIDATED NET INCOME SINCE 2012

Year In millions of euros	Net income attributable to owners of the company
2012	284.8
2013	292.8
2014	298.2
2015	437.3
2016	171

5.2 BREAKDOWN OF TRADE PAYABLES BY MATURITY DATE

In compliance with decree 2008-1492, information on the breakdown of outstanding trade payables by maturity date is provided below:

In thousands of euros	2015	2016
Invoices due	16,734	22,440
<30 days	9,429	11,593
From 31 to 60 days	1,695	2,649
>60 days	5,610	8,198
Invoices not yet due	222,781	281,593
<30 days	147,620	179,444
From 31 to 60 days	63,083	90,682
>60 days	12,078	11,467

Workforce, environmental and social information

Preliminary memo

RATP group has changed the scope of its CSR report for its fourth period.

Quantitative information on the scope of consolidation focuses on the parent company and on the 25 subsidiaries of RATP Dev operating in France, Europe and elsewhere around the world, representing the Group's core business. The Group decided to integrate the two legal structures of the Open Tour Paris, the holding and the sightseeing subsidiary, which organises tours for tourists in the French capital. Metrolink RATP Dev Ltd, the subsidiary in charge of operating the Manchester tramway up to July 2017, has been removed from the Group's scope. Variations in indicators compared with previous periods are mainly due to variations in this scope.

The scope covers 93.6% of consolidated turnover as at 31 December 2016.

Qualitative information covers 55 RATP Dev subsidiaries and Ixxi (smart transport systems), Promo Métro (transport space management and marketing), Telcité (fibre-optic management) and SEDP (real estate management and asset development) subsidiaries⁽¹⁾.

RATP group CSR policy

Public transport is a key source of leverage for managing the growing societal and environmental priorities of cities around the world. RATP group aims to provide an exemplary solution for these priorities on a daily basis, and to continue to strengthen its economic, social and environmental contribution to the areas it connects.

RATP has long been recognised as an urban operator, playing a special social role, with strong regional roots, particularly in Île-de-France. Thanks to its public transport operations, a natural source of leverage for environmental performance, RATP can boast a highly legitimate role in the creation of the sustainable city of the future, in coordination with other contributors to urban policies.

The expertise acquired by the company ensures its position as a key urban player, which intends to continue to promote close relations with local players to the benefit of urban policies. The company is resolutely committed to a development and sustainable mobility policy.

POLICY

RATP group is committed to establishing CSR as a line for performance. The Group's new CSR policy is based on a pragmatic approach, with exemplary professional practices on a day-to-day basis. A whole series of actions is currently being launched in this respect:

- dedicated communications and educational initiatives, particularly with the creation of CSR Trophies to establish positive emulation and promote the sharing and showcasing of good practices;
- two bodies assigned to coordinating and managing the across-the-board approach:
 - the Cersec (Ethics, CSR and Compliance Committee) created on 1 January 2017. The Committee aims to establish a culture based on ethics and conformity within the Group and assess programmes on conformity, and the prevention of the risk of corruption, as well as CSR action plans deployed by Group departments and subsidiaries. The Committee meets four times each year and meetings are chaired by the Chief Executive Officer. An annual activity report is presented by the Committee to the Audit Committee of the Board of Directors and the CSR Club,
 - the CSR Club launched in November 2016. The Club's target is to construct an action plan aiming to spread CSR culture throughout the Group via a network of referral agents.

Since 2016, CSR policy has been managed by the Strategy, Innovation and Development department of the parent company.

COMMITMENTS

RATP group has confirmed its ambitions in terms of the development of more sustainable cities via three strong commitments:

- **be a major contributor to sustainable mobility and sustainable cities:** by offering a connected mobility range, accessible to all, by developing a real estate policy combining the modernisation of industrial resources and integration in mixed urban programmes and by contributing to an improved development model in terms of public health;
- **reduce its environmental footprint:** by reducing its emissions, limiting consumption, once again improving the energy performance of its transport system and stations, developing its eco-design policies and joining a circular economy model;
- **confirm its social and societal responsibility:** by contributing to economic vitality and solidarity at regional level, promoting employment and supporting local introductory, educational and cultural projects via the Group Foundation.

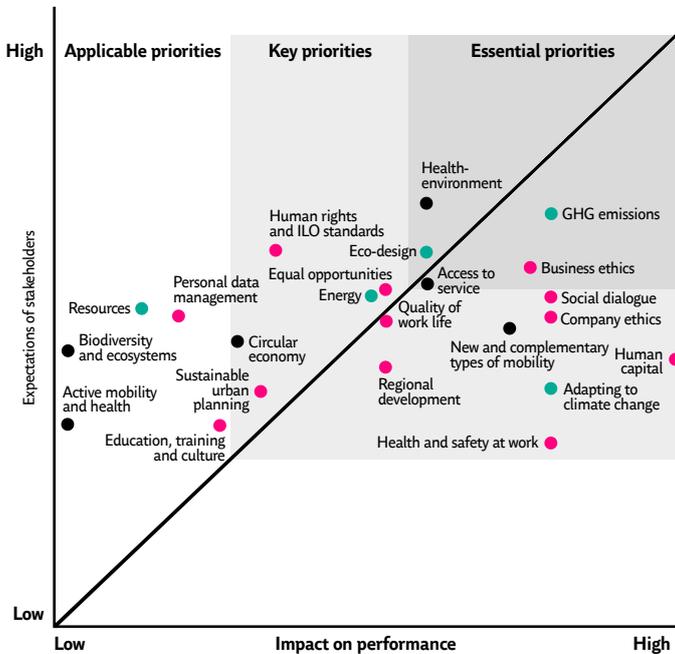
The company is consolidating its role as a key contributor to urban policies, while boosting the concept of performance and helping the Group to stand out, both of which are critical to development.

(1) Refer to the note on extra-financial reporting methodology for more details.

MATERIAL ANALYSIS

A material analysis was carried out in the second half of 2016 in order to establish an order of priority for features of the new CSR policy. Forty priorities were assessed by Group representatives and stakeholders (the government shareholder, employees, customers, public transport authorities, suppliers and sub-contractors, associations, etc.).

Five priorities were identified as essential, both for stakeholders and Group performance: the impacts of Group operations on health and the environment, GHG (Greenhouse gas) emissions, access to the service for all types of public, eco-design at Group level and business ethics (see below).



PARTICIPATION IN THE UNITED NATIONS GLOBAL COMPACT

CSR commitments complete the Group’s voluntary participation in the United Nations Global Compact, which it signed in 2003. In this respect, the company prepares a *Communication on progress* at the GC active level, which it has submitted to the UN site since 2010 (<https://www.unglobalcompact.org/participation/report/.../153461>).

This *Communication on progress* allows the company to renew its participation in the Global Compact and promote its commitments in terms of the ten principles of the Compact on human rights, labour, the environment and anti-corruption.

SOCIAL INFORMATION

Since its creation, RATP group has used the know-how and involvement of its teams, which it considers to be its primary asset. In order to truly involve its employees in the execution of their assignments and the Group’s expansion, the company aims to create a stimulating working environment and support the professional development of each individual. This is the key priority for the human resources policy implemented by the company on a daily basis.

The *RATP group Code of ethics* reiterates the principles behind Group initiatives, as an employer, in the fields of health, safety and the well-being of personnel in the workplace, while insisting on ensuring diversity and non-discrimination and maintaining quality of life at work.

The Cersec aims to guarantee that ethical, social and societal concerns are taken into consideration at the highest levels, while ensuring that each member of personnel – and each manager in particular – facing an unusual situation is able to reach a fair decision based on company values, as well as the applicable law and external and internal regulations.

1 Employment

1.1 TOTAL NUMBER OF MEMBERS OF PERSONNEL AND BREAKDOWN BY GENDER, AGE AND GEOGRAPHIC SEGMENT

Total number of Group employees

Parent company + subsidiaries in question	31/12/2016	31/12/2015	31/12/2014
Full time equivalents	55,975	56,728	54,014
Actual number of members of personnel	56,911	57,801	54,790

The report on personnel focuses on the parent company and 25 subsidiaries, i.e. 93.6% of the Group in terms of turnover.

Breakdown by age

Actual number of members of personnel as a %	31/12/2016	31/12/2015	31/12/2014
Under 26	4.03	4.18	4.41
26-35	27.15	27.23	27.85
36-45	32.95	32.45	32.54
46-55	28.37	28.80	28.98
56+	7.50	7.34	6.21

Breakdown by geographic segment

Actual number of members of personnel as a %	31/12/2016	31/12/2015	31/12/2014
France	82.77	81.61	83.39
Europe excluding France	7.56	9.01	7.00
Rest of the world	9.67	9.38	9.61

Europe is considered geographically and therefore includes Switzerland.

Gender breakdown by geographic segment

	Men			Women		
	31/12/2016	31/12/2015	31/12/2014	31/12/2016	31/12/2015	31/12/2014
France	37,495	37,640	36,404	9,612	9,533	9,284
Europe excluding France	3,889	4,657	3,427	412	551	411
Rest of the world	4,660	4,610	4,506	845	809	758

1.2 PAY AND PROMOTIONS

Pay

	31/12/2016	31/12/2015	31/12/2014
Group gross total personnel expenses (in thousands of euros)	2,172,899	2,173,158	2,057,067
RMPP parent company (mean pay per existing member of personnel = general policy + category-based benefits + individual benefits) as a %	2.00	2.20	2.80

In 2016, the mean pay per existing member of personnel (RMPP) increased by 2% for the parent company, in a context of near-zero inflation. This indicator reflects the mean increase in wages based on general, individual and category-based policies for staff present over the period in question. This indicator can be used to assess mean overall variation in pay and simplifies comparisons with other companies.

In 2016, 95 parent company employees received compensation to maintain their purchasing power (IMPA), launched in the context of an agreement to the benefit of employees whose statutory pay increased by less than inflation over a four-year reference period. 344 people had benefited from this compensation in 2015.

Furthermore, the parent company and trade unions representing personnel once again modified employee savings schemes and launched a Group pension fund (Perco). Employees can now make payments or transfer days from their time credit account, and benefit from an additional contribution by the company.

Breakdown by gender

Actual number of members of personnel as a %	31/12/2016	31/12/2015	31/12/2014
Women	19.10	18.85	19.08
Men	80.90	81.15	80.92

Policies aiming to increase the participation of women are covered in paragraph 6.1 "Professional gender equality".

1.3 RECRUITMENTS AND DEPARTURES

As a whole number = as an absolute value	31/12/2016	31/12/2015	31/12/2014
Recruitments	4,905	5,465	4,005
Departures:	5,174	4,387	3,312
• Retirements	1,858	1,255	1,040
• Resignations	1,235	1,258	892
• Redundancies	742	958	802
Other*	1,339	916	578

* The "Other" heading includes conventional departures such as the expiry of fixed-term contracts and deaths.

After almost 3,300 recruitments, RATP is one of the main recruiters in Île-de-France, which has long promoted recruitment reflecting the diversity of the regions it connects, and prefers applications from a range of different backgrounds. Today, RATP is continuing to apply a dynamic employment policy, aiming to attract new and talented members of personnel.

Thanks to the new agreement on the jobs and skills planning protocol (GPEC) signed in 2016, the parent company has confirmed its aim to promote access to employment and maintain people in their jobs by simplifying the inter-generational transmission of knowledge and skills and supporting the sustainable integration of young adults, particularly via introductory and sandwich courses. RATP plans to develop its apprenticeship programmes, and targets at least 450 sandwich students per year. The company uses this approach to ensure that the skills expected of applicants fully match its recruitment needs. RATP aims to merge the corporate environment and the educational environment, creating a fully-fledged training unit for urban transport trades.

The company has committed to recruiting young adults aged 26 or less for long-term jobs as part of a new GPEC agreement, representing 25% to 30% of recruitment, excluding fixed-term contracts. In parallel, the company is confirming its policy in favour of the employment and continued employment of senior employees, and has committed to ensuring that 15% or more of its employees are aged 50 or over and 1.5% of recruitment, excluding fixed-term contracts, will target the same age group.

End-2016, the parent company signed a partnership agreement with the French Army in relation to voluntary national service, a system aiming to help young people without qualifications, and out of contact with the labour market, to obtain a job. All beneficiaries are volunteers. This system combines civic and military training with behavioural and educational courses, as well as occupational training sessions leading to either a certificate or a preliminary certificate⁽²⁾. RATP considers that this agreement aims to establish a training route allowing young adults to become bus drivers, with a potential permanent contract or a professional training contract.

The parent company also works in cooperation with several small and large departments on the outskirts of Paris, implementing initiatives targeting audiences from the unqualified to those with advanced level equivalent qualifications, in the context of pre-qualifying programmes, co-organised and financed by institutional partners (regional councils, departmental councils, and large urban communities, etc.). These systems go beyond the integration of individuals with low levels of qualification, and also help to develop RATP's policy on diversity and female participation.

2 Organisation of working hours

2.1 ORGANISATION OF WORKING HOURS

Part-time employees

Actual number of members of personnel	31/12/2016	31/12/2015	31/12/2014
Proportion for the entire Group	3.94%	4.17%	3.45%

Approximately 96% of Group employees work full-time. Thanks to the parent company, employees wishing to do so can work part-time, helping to balance their work and private lives.

Employment contracts define the particularities of part-time work in some RATP Dev subsidiaries due to their specific operating procedures and working structures, e.g. to incorporate fluctuations in inter-urban transport.

2.2 ABSENTEEISM

Number of days of absence by employee

	31/12/2016	31/12/2015	31/12/2014
All reasons*	13.19	13.36	12.59

* With the exception of maternity leave.

Periods of absence due to sickness, including long-term sickness, represent over three quarters of absences. Information on accidents at work is covered in paragraph 4.3 "Accidents at work (frequency, seriousness, occupational illnesses)".

Absenteeism remains high in some operating sectors, which has led to the implementation of an ever-more vigilant prevention and support policy.

Generally, improving the levels of employee presence is a key priority for the company in terms of social performance.

3 Social relations

3.1 SOCIAL DIALOGUE: CONSULTATION PROCEDURES, BARGAINING

Social dialogue is a key factor in the Group's identity and helps to boost its performance. The parent company refers to the agreement on union rights and the quality of social dialogue, signed in 2011 by all trade unions representing personnel. This agreement aims to promote constructive social dialogue with a preference for collective bargaining. Each year, social partners give their opinion on the quality of social relations as part of the report by the social dialogue commission.

In order to match its development outside of Île-de-France, in 2012, the Group launched an RATP France group council with a scope of 60 odd subsidiaries. In 2016, management and several trade unions signed an agreement on the creation of an RATP European works council⁽³⁾. This body will obtain information and discuss the Group's strategy and situation at European level. The representatives of European employees will therefore be informed and/or consulted on matters affecting all of the companies covered by the scope of the agreement.

In 2016, the social warning system – which is also used by French subsidiaries – fully played its role in preventing social conflict, as only 5% of the warnings activated within the parent company led to a strike notice in 2016. In addition, the number of warnings is falling. This trend reflects the continued attempt to reach solutions via dialogue at a very early stage, to prevent any industrial relations conflict.

However, with 0.77 day of conflict/striking per agent in 2016 (compared with 0.51 in 2015), the parent company has recorded a number of days of striking/operator in excess of the sector figure (0.41 day of striking/operator for companies in the public and private sectors) for the first time since 2010. This increase was mainly caused by striking against factors bearing no relation to the company.

Group subsidiaries abroad are also preferably opting for close relations and dialogue with employees or their representatives, based on procedures in compliance with local regulations and legislation. Subsidiaries in the United Kingdom maintain a highly structured level of social dialogue and conflict prevention is a key feature of this dialogue, via discussions with trade unions in the sector or via other types of employee representation. In Algeria, Setram adopted the social warning system in 2016, when launching a procedure to prevent collective conflict and the use of the right to strike within the company. In Morocco, Casa Tram is committed to sustainable and constructive social dialogue as part of its CSR policy, which was formally recognised in 2016. Following an assessment of its management processes and governance, the subsidiary was awarded the CSR label by the general confederation of Moroccan enterprises (CGEM), for Casa Tram's commitment to corporate social responsibility, incorporating the expectations of its stakeholders in its strategy and its continuous improvements policy.

(2) These "trainee volunteers" join the French Army for a period of six to twelve months, depending on their selected training course.

(3) The scope of the RATP European works council covers the parent company and subsidiaries present in France, the United Kingdom and Italy, if more than 50% of capital is held by RATP.

3.2 REPORT ON COLLECTIVE AGREEMENTS AND THE IMPACT ON ECONOMIC PERFORMANCE AND WORKING CONDITIONS

	2016	2015	2014
Number of agreements signed during the year	62	49	79

Within the parent company, new across-the-board agreements have replaced the previous agreements. These agreements aim to improve the working conditions of employees while enhancing the economic performance of the company. These agreements particularly focus on employee participation, the Group pension fund, miscellaneous social and profit-sharing initiatives, corporate complementary social protection, the company's contribution to employment vouchers, and also the jobs and skills planning protocol (GPEC). Furthermore, an agreement on telecommuting trials, bonus working hours at the end of a career, and the recruitment of part-time bus drivers was signed in 2016. The goal is to test various systems aiming to improve the balance between work and private lives throughout the careers of employees.

Group social dialogue is decentralised and French subsidiaries organise their own discussion cycles on the topics covered by mandatory annual negotiations (NAO) or more specific subjects (employee participation, generational agreement, etc.). Several agreements were signed in 2016, on gender equality (Cars Dunois, Cars Perrier, STU Bourges, TVM, FlexCité 77 and FlexCité 94), participation, employee participation, the creation of time credit accounts (Compagnie des transports du Valenciennois et du Hainaut – CTVH, Cars Perrier, Orlyval Service – OVS, STI Allier, STI Centre and Ixxi), on pay for on-call periods or night work (OVS and Ixxi). These agreements allow the subsidiaries to reconcile social performance and economic performance, particularly by adapting services to requirements.

In order to improve the balance between work and employees' private lives, several subsidiaries have adopted turnover tables, which limit services where workload varies significantly or with multiple periods of downtime, and which improve long-term planning, or ensure a more balanced workload over the course of each day. This applies for CTVH, Open Tour Paris, Cars Perrier, Vienne Mobilités and Céobus. Moulins Mobilité restructured services when extending the network, with more balanced breaks and room for manoeuvre, and with constant levels of personnel. Similar initiatives were launched at RATP El Djazair, during Ramadan, and by Setram. Ixxi allows its employees to carry out some of their tasks from home, contributing to this logic, while guaranteeing greater flexibility for the subsidiary and boosting staff responsiveness, ensuring opportunities are fully seized.

4 Health and safety

4.1 HEALTH AND SAFETY CONDITIONS AT WORK

In its strategic plan, RATP group confirms its aim to offer exemplary health and safety conditions at work.

In the context of the 2016-2020 contract signed by STIF (Syndicat des transports d'Île-de-France – Île-de-France public transport authority), the parent company committed to launching initiatives to reduce employee exposure to diesel emissions and fine particles in underground spaces. Commitments to passengers are covered in the environmental section (paragraph 2.1 "Air, water and soil discharges: prevention and correction"). In 2016, RATP launched a scientific board, with the participation of various experts in multi-disciplinary fields, which can be used to establish an order of priority for the studies implemented by the company in terms of indoor air quality.

In terms of prevention, the parent company is supported by an independent health service employing 33 occupational physicians. The parent company also provides all of its employees with a totally free healthcare service, via several medical centres.

In 2016, the parent company, the comité régé d'entreprise (CRE – corporate governance committee), the mutuelle du personnel du Groupe (MPGR – RATP group personnel health insurer) and the union sportive métropolitaine des transports (USMT – Paris transport sports club) also concluded a partnership, whereby they commit to contributing to employee well-being and balance, as part of a multi-disciplinary approach, but each in their respective fields. The aim is to propose a section covering health (and healthcare), a section on general hygiene and nutrition (in cooperation with company restaurants) and a section focusing on regular, but gentle, fitness activities at work.

Awareness initiatives are organised within subsidiaries in the different fields: nutrition and general hygiene, in partnership with dietary specialists, particularly targeting drivers, who often work staggered working hours (FlexCité 93, London United Busways – LUB); addictions (TVM); working postures and gestures, in cooperation with ergonomists, osteopaths and physical therapists (Céobus, STI Centre, Cars Perrier and FlexCité), e.g. via exercise to release stress and tension from driving or ensure employee awareness of musculo-skeletal disorders.

RATP El Djazair is planning to open an occupational health centre in 2017 to improve employee check-ups, particularly those working in 3x8 shifts, who will benefit from two yearly check-ups.

Improving working conditions also requires premises to be modified to ensure greater comfort (STU Vierzon, STI Centre, Cars Perrier, HR Richmond Ltd, Fullington Auto Bus Company, Setram, RATP El Djazair, TP CH and Timbus) or the acquisition of vehicles with more ergonomic seats (The Original London Tour – TOT, FlexCité 77).

4.2 REPORT ON AGREEMENTS ON THESE SUBJECTS

Towards the end of 2011, the parent company signed a five-year agreement on the prevention of psychosocial risks. An operational consultancy and support platform has been created since this time. Managers, union representatives, occupational doctors and the employees themselves (as part of a “request for attention” procedure) can use this platform. Renegotiating this agreement is on the corporate agenda for 2017.

4.3 ACCIDENTS AT WORK (FREQUENCY, SERIOUSNESS, OCCUPATIONAL ILLNESSES)

	31/12/2016	31/12/2015	31/12/2014
Number of accidents at work with leave	2,562	2,740	2,740
Number of days of leave (calendar days)	174,948	170,672	156,679
Number of hours worked (real hours)	82,781,773	83,471,914	79,192,723
Frequency	30.95	32.83	34.60
Seriousness	2.11	2.04	1.98

In 2016, the main causes of accidents at work varied little: movements or falls due to a change in level, aggression.

The frequency of accidents at work has dropped for the parent company, falling from over 40 to approximately 35. In parallel, the degree of seriousness has fallen, but to a lesser extent, as the duration of leave has extended. The Executive Board pays close attention to variation in these indicators, and weekly statistics are monitored, reflecting the importance of the matter in the eyes of Group management.

While the policy launched by RATP on preventing accidents at work has decreased the number of accidents, this policy must be continued and extended in view of the seriousness of these accidents. A system is being launched in order to boost the decrease in the number of accidents. This system incorporates actions in four complementary fields:

- preventing accidents at work, in order to improve the understanding of accidents at work and thereby better target prevention initiatives;
- managing the post-accident monitoring and declaration process;
- ensuring the awareness of all members of personnel in terms of preventing and reducing accidents at work, by checking that the departments apply prevention policies by improving the understanding of the topic and related priorities;
- ensuring employees’ professional approach, by providing them with the necessary skills and knowledge of these matters, depending on their level of responsibility and assignments.

In 2016, French and Swiss Group subsidiaries launched an innovative safety and prevention operation in this field. Target: confirm safety as a key factor in all aspects of the activity, for both customers and personnel. The “*La sécurité, j’en fais mon affaire*” (I make safety my business) programme is based on a collective and widely-shared process, on the distribution of a safety reference document to all France – Swiss business unit drivers, on the appointment of a referral driver in each subsidiary, as an expert for other drivers and all internal stakeholders (maintenance, personnel representative, CHSCT [Committee for hygiene, safety and working conditions], etc.) and on the launch of management tools for all managers, for the execution and systematic transfer of all audits and avoidability analyses if an accident occurs.

In the United Kingdom, all of the Group’s London sites are now BS OHSAS⁽⁴⁾ 18001 certified, confirming strict risk prevention and safety management, particularly thanks to training for managers and senior directors in this field. TOT, the sightseeing subsidiary in London, and Bombela Operating Company (BOC) in South Africa, have launched similar certification processes.

In terms of prevention, other initiatives were carried out in 2016: assessment of risks and arduous working conditions for each workstation and an associated action plan (Bournemouth Transport Ltd, BOC, RATP El Djazaïr, Setram, Gest), identification of psychosocial risks (creation of a dedicated committee for FlexCité 93, prevention process for this type of risks at Promo Métro), and the systematic analysis of each accident at work in view of preventive measures (RATP El Djazaïr, Setram, FlexCité 93, Fullington Auto Bus Company). Hands-on action has also been taken in some depots: marking out dangerous zones, drafting new traffic plans and ensuring safe pedestrian routes (Cars Dunois, HR Richmond Ltd, Selwyn Travels and FlexCité 94).

The RATP occupational medicine service carries out 45,000 clinical medical examinations and over 4,000 check-ups for occupational illnesses each year.

A partnership between the parent company and the French institute for public health surveillance (Institut national de veille sanitaire) was also created in 2013, aiming to create a new epidemiological surveillance system to better identify potential risk factors for employee health. This partnership was formally established in 2014 as part of a three-year agreement.

The parent company is also strongly committed to supporting employees declared partially or fully inapt for their positions, and aims to reach solutions to ensure the continued employment of these employees. The parent company particularly attempts to involve all managers in these matters, and refers to a policy aiming to manage and prevent situations where an employee becomes inapt, by preventing the occurrence of working situations likely to exclude employees, or organising a transfer to a different position if necessary. Thanks to these joint initiatives, the number of temporarily inapt employees dropped significantly in 2016.

(4) Occupational health and safety assessment series.

5 Employee training

5.1 POLICIES IMPLEMENTED

Training is a structural component, which allows employees to enhance their skills throughout their careers, ensuring the long-term performance of RATP group in social, human and economic terms.

Within the parent company:

- three out of four employees are trained each year;
- the training plan for 2016 dedicated approximately 6.8% of personnel expenses to training, including around 1.8% to initial training;
- training is governed by two texts: the agreement on continuous development training from 2013, and the three-year guidelines on professional training 2015-2017.

RATP group can boast an internal university, whose aim is to share a joint culture. The university federates all Group employees, regardless of their categories, ambitions and trades, around an across-the-board range of training sessions, particularly in the field of management. The university boasts a training centre, the Campus, which specifically focuses on providing support for professional integration and career development.

End-2016, the Group launched a large-scale on-line awareness programme for all members of personnel on priorities and usages for digital technologies. Goal: allow staff to get used to this new digital environment, which modifies tools, organisations, and processes, as well as day-to-day relations.

The parent company also now monitors training and awareness initiatives focusing on secularity/neutrality-related issues, designed for existing or newly-recruited employees.

In 2016, subsidiary training budgets proved stable in general, with many such budgets even increasing, particularly for Ixxi, which saw a 150% increase in order to cover its development strategy. The commitment of some subsidiaries exceeds well beyond legal requirements (Open Tour Paris, Vienne Mobilités, Sqybus, TVM and SEDP).

In addition to the obligations inherent to their activity, many subsidiaries, particularly French operations, have launched training sessions on safety-related matters, whether first aid or the prevention of conflictual situations (Moulins Mobilité, Cars Dunois, Cars Perrier, CTB and SEDP). In London, end-2016, LUB launched a coach training programme to prevent conflict on-board buses.

Accessibility and the handling of people with reduced mobility are also areas in which subsidiaries are continuing to invest significantly, in France (Moulins Mobilité, CTY, Stile, CTVMI, Mobicité and FlexCité 92) and abroad (Bournemouth Transport Ltd, for people suffering from dementia), frequently in partnership with specialist associations. FlexCité 77 can offer its staff training on how to treat people with reduced mobility appropriately, prepared in partnership with a consultancy agency and the medico-legal sector. This training course focuses on a respectful attitude and how to approach vulnerable individuals, to promote their well-being while bearing the risk of abuse in mind. A charter of commitment is issued with this course.

Several subsidiaries have highlighted the professional expertise of their personnel via their training programmes, particularly in the context of certifications or accreditations: in the United Kingdom, TOT and Bournemouth Transport Ltd are continuing with an IRTEC⁽⁵⁾ accreditation programme for their maintenance engineers; LUB has completed various initiatives, particularly in relation to health and safety at work (IOSH certification, Nebosh Diploma) and leadership (City and guilds qualification). In France, EM Services has applied the same approach with Afnor, to obtain certification for energy audits.

5.2 TOTAL NUMBER OF HOURS OF TRAINING

Training

	2016	2015	2014
Number of hours of training	2,386,476	2,573,122	2,131,115

6 Diversity and equal opportunities

6.1 PROFESSIONAL AND WAGE-BASED GENDER EQUALITY

The fourth agreement on professional and wage-based gender equality within the parent company was signed in 2015, and unanimously approved by all trade unions representing personnel. This agreement follows on from the 2012 agreement, whose targets had been achieved.

This agreement establishes four key commitments:

- a commitment to take all possible action to improve the percentage of female employees in the company;
- a commitment to pay female employees on maternity leave and both men and women on paternity or adoption leave;
- a commitment to ensure a balance between work and the private lives of its employees thanks to reasonable meeting times and use of telephone and e-mails;
- a commitment to increasing the number of female members on management boards to match the percentage of female managers in each department as far as possible.

An information brochure on this agreement and these commitments, available to employees, helps to fight stereotypes.

An “*RATP au féminin*” (RATP women) programme, created at the initiative of the Chief Executive Officer, completes these commitments and includes them in the Group’s strategic guidelines.

These commitments took real shape in 2016, particularly with the launch of targeted actions, in cooperation with corporate associations, the European Community and the Ministry of National Education.

The human resources service of the parent company, jointly with operational units, is continuing with and reinforcing actions to promote gender equality, particularly in terms of introduction to trades and the fight against stereotypes.

(5) Institute of road transport engineers certificate.

In 2016, the percentage of women in the parent company rose slightly, to 20.3% (compared with 20.1% in 2015).

The French RATP Dev subsidiaries are also continuing to increase the percentage of female employees, including in the smallest structures: Céobus has doubled the number of women in the company with a professional training contract (13 in 2016, *versus* 6 in 2015). 30% of this subsidiary's staff is now female. TVM reached this threshold in 2016. These subsidiaries are therefore on par with Ixxi or STU Bourges, which could already boast approximately 30% female employees in 2015. In parallel, several subsidiaries have signed agreements on equal wages for men and women (Cars Dunois, Cars Perrier, STU Bourges, TVM, FlexCité 77 and FlexCité 94). This trend continues abroad. This is demonstrated through the Business and technology education council (BTEC) and City and guilds qualifications, which incorporate the principles of diversity and equal treatment, obtained by LUB with a view to driver training. In the same way, the CSR policy of Casa Tram provides for new initiatives to increase the percentage of women in the company.

Gender equality

	31/12/2016	31/12/2015	31/12/2014
Percentage of women in the total number of members of personnel	19.10	18.85	19.08
Percentage of female directors	33.04	28.88	30.42

Three out of the ten members of the Group's Executive Board are currently female; the RATP Board of Directors, appointed in 2014, can boast 11 female out of a total of 27 members, *i.e.* approx. 40%.

6.2 EMPLOYING AND INTEGRATING THE DISABLED

Employing and integrating the disabled

	31/12/2016	31/12/2015	31/12/2014
Number of disabled employees recruited	95	88	52
Total number of employees with a declared disability	1,744	1,685	1,493

End-2015, a seventh agreement on the disabled within RATP was unanimously signed for the period 2016-2019. With this agreement, the parent company commits to continuing with its voluntarist policy supporting the disabled and involving all company operators. The agreement sets a target: the recruitment of at least 125 disabled employees over a four-year period. Furthermore, the agreement provides for initiatives to maintain the disabled in employment, on the basis of fair allocation criteria (adapting the workstation, telecommuting, purchasing suitable equipment, etc.), increased employee awareness and the implementation of a suitable and protected solidarity policy in the sector, by entrusting services to sites and services helping the disabled to find work (Esat) or adapted firms for the disabled (EA).

In 2016, the parent company recruited 70 disabled employees. The parent company is involved in 292 initiatives to keep the disabled in a job to the benefit of 234 disabled employees. The company employs a total of 1,578 disabled employees.

In France, STI Centre is particularly ahead of the pack in terms of the employment and integration of the disabled, and is applying a highly voluntarist approach in this respect: 20% of the subsidiary's workers are disabled, and one of its sites now employs over 20%, compared with 14% in 2014. This subsidiary – similar to Cars Perrier – is also continuing to cooperate with Sameth (support service for keeping the disabled in jobs) to support disabled employees as far as possible.

6.3 FIGHTING DISCRIMINATION

RATP Group's Code of ethics, adopted in 2011, reiterates that diversity, equal opportunities, an open approach and solidarity are fundamental principles behind actions.

In terms of the fight against discrimination, the parent company is committed in four fields, via agreements with trade unions: disability (since 1994), social integration (since 1996), gender equality (since 2003), age management (since 2009). These agreements follow on from other significant actions, such as signing the charter on diversity in 2004 or adopting anonymous CV in 2007.

In 2005, the principle of neutrality was incorporated in staff employment contracts and in the rules of procedure of each parent company site. In 2013, the Group distributed a practical guide *Laïcité et neutralité dans l'entreprise* (Secularity and neutrality in a company environment) to its managers. This guide was adapted in 2014 for French Group subsidiaries (*Traitement du fait religieux dans les filiales françaises du groupe RATP* – How to handle religion within RATP group subsidiaries in France), and reiterates the legal principles and rules applicable in subsidiaries, depending on whether the latter offer a public service or not. RATP was one of the first leading French firms to provide such a guide, based on practical sheets, to manage the different situations likely to arise in the workplace.

In order to reinforce this approach, the parent company created a general delegation of ethics end-2015, reporting to the Chief Executive Officer. This delegation can provide hands-on assistance for local managers and ensure the effective application of the clause on secularity in the employment contract. A training session, focusing on these matters, was also launched for superiors and the professional interview now includes a discussion of these points with the employee.

In 2016, the parent company also launched the "*Travailler ensemble*" (Working together) plan, which confirms the principles of secularity, neutrality and non-discrimination, prepared in cooperation with the departments and trade unions. This plan particularly reiterates that, in a company responsible for a public service, neutrality rules are critical. This plan particularly relates to recruitment, training, personnel assignment, assessment, and the professional participation of women⁽⁶⁾. In this context, RATP developed a serious game, in partnership with SNCF⁽⁷⁾. This educational tools helps to support and

(6) In this context, RATP was involved in national secularity day ("*Journée nationale de la laïcité*") on 9 December 2016: on this occasion, each company service was asked to organise events relating to secularity, neutrality and non-discrimination. Goal: confirm Group values and promote the assimilation of these values by all employees.

(7) This serious game, with the title "Prodiversité" (Prodiversity), was rewarded at the Diversity Trophies 2016, in the "Training" category.

train new staff in the priorities of diversity and non-discrimination, and ensure managers acquire the right reflexes and identify appropriate responses in these fields.

Subsidiaries apply the same principles of non-discrimination, in compliance with national legislation. In France, some subsidiaries use systems to guarantee that the selection criteria applied during recruitment processes remain objective: in Haute-Savoie, Gem'bus and TP2A refer to the simulation method of Pôle emploi (French job seekers' office), particularly for contracts assisting people with returning to a sustainable position and operational preparation for employment. Other subsidiaries use panel-based decisions for all recruitment processes (Cars Dunois).

Internationally, in 2016, several subsidiaries adopted a code or charter of ethics. These texts, which integrate Group values, particularly confirm the commitment to fight any form of discrimination. In Italy, Gest and Cilia Italia refer to a code of ethics. Compliance with this code is regularly checked by the *ad hoc* body. The CSR charter adopted by Casa Tram also promotes equal opportunities. In the United States, Fullington Auto Bus Company is continuing with the annual review of its anti-discrimination policy to match the best standards in the field. In South Africa, BOC publishes statistical reports each year on corporate diversity, in application of the Employment equity act 55 of 1998.

7 Promotion and compliance with the provisions of the conventions of the International labour organization (ILO)

The introduction to the *RATP Group's Code of ethics* reiterates the Group's six shared values: people, general interest, respect, professionalism to the benefit of customers, a taste for challenges, open-mindedness. This code is intended for all Group managers, and follows on from the existing commitments of the parent company, which signed the United Nations Global Compact in 2003, thereby undertaking to respect the 10 founding principles in terms of human rights, labour, the environment and anti-corruption.

The code of ethics reiterates the major principles, such as meeting the commitments of Group employees and vigilance, to avoid passively contributing to any form of forced labour, involving either adults or children, including by suppliers. Eliminating professional and labour discrimination is a fully-fledged policy (see the above paragraph). The code of ethics is available in French and English from the Group intranet.

In addition, the due application of the ILO principles is also checked as part of the supplier targeted audit programme (societal section, paragraph 4.1 "Preventing corruption and promoting human rights").

Furthermore, since end-2016, in accordance with the Savary act of 22 March 2016, operators working for the internal security services of the parent company are subject to a code of conduct defined in a decree⁽⁸⁾, which includes all of their rights and duties in the context of their assignments. This code of conduct is handed to each operator and is also displayed on the premises and available on the intranet.

RATP Dev subsidiaries, particularly in the United Kingdom and in the United States, have incorporated the ILO principles for many years, and these principles are included in national or federal legislation. On this basis, all suppliers must comply with the *Ethical trading initiative base code*⁽⁹⁾. In South Africa, purchases are subject to a code of conduct.

ENVIRONMENTAL INFORMATION

1 Environmental policy

RATP group commits to improving its approach on a daily basis and anchoring the protection of the environment at the heart of its initiatives. Reducing its environmental footprint is one of its key concerns. The aim is both to save resources (water, energy, paper, etc.) and help to strengthen its environmental contribution to the areas served. With this in mind, the Group aims to reinforce its efforts to:

- reduce the emissions of its industrial activities, by implementing ambitious commitments based on the energy transition for the bus mode in Île-de-France by 2025 (80% electric buses and 20% biogas buses) and, more generally, by speeding up the move to carbon-free transport around the world (bus rolling stock, rail infrastructures and operating systems). Real estate assets are also strictly managed, aiming to reduce greenhouse gas emissions by 50% by 2025 (base 2007);
- reducing nuisances caused by Group activities: by continuing in line with the health and environmental aspects of the CSR policy, e.g. by reducing noise pollution in partnership with Ademe (French environment and energy management agency);
- managing consumption and reinforcing continuous improvements policies, particularly by targeting certification programmes (ISO 14001, OHSAS 18001, ISO 50001);
- integrating the circular economy at the heart of company operations, by preparing and deploying an ambitious action plan, ranging from eco-design to recycling, not forgetting responsible purchases;
- continuing with restructuring operations for industrial sites, to improve their integration in urban life, by highlighting Group expertise in terms of the re-use of industrial sites, social and functional mixing, and environmental standards (HQE/BPOS⁽¹⁰⁾).

1.1 GROUP ENVIRONMENTAL ORGANISATION

RATP group subsidiaries and departments adapt their own environmental priorities to match their activities. Responsibilities are delegated to the departments and subsidiaries in terms of compliance

(8) Decree no. 2016-1495 of 4 November 2016 on the creation of a code of conduct for the operators of the internal safety services of SNCF and RATP.

(9) International reference on good labour practices, as recognised by the ILO.

(10) HQE: High environmental quality – BPOS or BEPOS: Positive energy building.

with environmental regulations and the launch of EMS (Environmental management system) certified as per ISO 14001.

- SEDP, a Group real estate management subsidiary, has established its own sustainable development policy.
- Casa Tram in Morocco launched a CSR charter this year, adapting four priority lines: using renewable energies, ensuring awareness of employees and stakeholders regarding sustainable development, reducing the volume of waste produced, water and power consumption, and promoting the most environmentally-friendly technologies.

Furthermore, the Group is committed to a large-scale operation to certify its activities: ISO 14001 for all industrial sites by 2020, QSE (Quality, safety and the environment) certification for most of its industrial activities, EFQM and ISO 50001 (energy management). A dedicated steering committee deploys the certification plan for 2015-2017. This committee defines the appropriate actions, monitors operations and coordinates the contributions of the various departments and subsidiaries in this respect.

The purpose is to incorporate the actions in a continuous improvements process, aiming to reach the highest international standards. Just consider the evidence:

- the rolling stock department obtained standard acronym certification for its rolling stock maintenance and provision activities at its 23 bus centres. On this basis, line T3b, part of the scope, is the first tramway line to be certified QSE. In 2016, the RATP training campus obtained ISO 14001 certification;
- SEDP is OPQIBI (engineering certification body) certified for the energy audits it carries out on industrial, tertiary or accommodation buildings, with the RGE (*Reconnu garant de l'environnement* – environmental guarantor) indication;
- EM Services, a mobility consultancy subsidiary, supports over 150 companies with the transport part of their energy audits thanks to its Afnor certification (obtained in 2015);
- in France, FlexCité has obtained the international standard, ISO 26000, on all aspects of CSR, particularly on the voluntary nature of its approach and the involvement of personnel;
- in South Africa, Bombela Operating Company (BOC) can offer a series of references and guarantees in environmental terms: at international level, its ISO 14001 certification was renewed in 2016, and at national level, the firm holds O&M-EMP (Operation and maintenance of the environmental management plan) approval, as well as a water use licence (WUL).

The following tables reflect the active approach of the company.

Certified industrial sites

	31/12/2016	31/12/2015	31/12/2014
Number	75	73	71

End-2016, 75% of the industrial sites of the parent company were ISO 14001 certified.

Industrial sites with an EMS

	31/12/2016	31/12/2015	31/12/2014
Number	86	86	84

1.2 EMPLOYEE TRAINING AND INFORMATION ON THE PROTECTION OF THE ENVIRONMENT

The training range includes many across-the-board and specific sessions (waste management, the international transport of dangerous goods by road [ADR]⁽¹¹⁾, environmental audits, etc.). At local level, all of the industrial sites of the parent company, with their own EMS, ensure that their personnel and service providers are aware of the company's environmental policy and obligations in terms of conformity and the action to take in emergency situations.

In 2016, 8,680 hours of across-the-board training focused on ensuring the training et awareness of parent company employees. 1,804 employees benefited from these sessions. These training sessions are completed by:

- participating at workshops organised by Ademe, Ville de Paris, and APC (Agence parisienne du climat – Paris climate agency);
- leading internal networks and organising a morning of discussions on the circular economy;
- ensuring the awareness of new arrivals at certified industrial sites;
- ensuring that sub-contractors and suppliers are aware of the Group's environmental commitments;
- internal communications, accessible for all employees.

At Group level, SEDP has ensured that all 80 of its employees are aware of sustainable development and has trained operating project managers and operating directors in the eco-management of tertiary sites and the eco-design of projects. The subsidiary distributes internal communications on its sustainable development policy via the intranet and the Group's newsletter, and external communications via its website www.sedp.com.

The Environmental Trophy

RATP organised the first edition of the Environmental Trophy this year, rewarding projects in three categories:

- climate, air and energy;
- the circular economy;
- nuisance management and modifications.

The environmental projects selected included CSR points as they all led to economic, social and societal benefits at their level.

The "Innov & Go" challenge

The "Innov & Go" challenge was launched in 2014 by RATP Dev and rewards highly innovative ideas, which add value and can be repeated by other Group subsidiaries. The second edition confirmed the dynamic innovation policy applied by RATP Dev with 118 eligible projects and 36 subsidiaries contributing to this challenge.

ECO-DRIVING OR MANAGED DRIVING

Bus driver training organised by the parent company focuses on the links between driver behaviour, fuel consumption and premature wear to stock. This training is systematically included in initial and continuous development training for the 15,000 bus drivers. An annual competition, the Eco-challenge, rewards bus lines and maintenance centres with the largest reductions in fuel consumption.

(11) European agreement on the international carriage of dangerous goods by road.

The training sessions organised by RATP Dev subsidiaries focus on this same goal, e.g.:

- TP2A, RATP Dev subsidiary and Transports Genevois, in Savoy, launched an eco-driving challenge rewarding the best drivers and allowing other drivers to receive advice from a driving coach. Over 56,000 litres of diesel were saved in this way between 2015 and 2016, i.e. 25,000 litres/year, representing approximately 50,000 euros in savings;
- in the United Kingdom, HR Richmond Ltd introduced on-board vehicle cameras to ensure that drivers behave in a responsible manner and to provide feedback on their driving skills, particularly in case of an incident or accident;
- Setram, in Algeria, launched an initial and continuous development training programme for tramway drivers for coasting phases using kinetic energy.

Number of hours of training

Parent company	31/12/2016	31/12/2015	31/12/2014
Number	8,680	7,894	7,480

1.3 RESOURCES DEDICATED TO PREVENTING ENVIRONMENTAL RISKS

The parent company is committed to reducing pollution and other factors adversely affecting the health of passengers, local residents and its staff and adopting a vigilant and preventative approach to emerging risks. The parent company monitors and provides expertise at all times, while checking the conformity of its sites with an environmental classification and deploying a series of initiatives: anti-pollution kits, awareness programmes, ensuring conform storage, etc. It also ensures that discharges reach the drainage network in a compliant manner on all sites and multiplies its initiatives to establish buses as an exemplary form of urban transport in terms of sustainable development via the Bus2025 plan (mentioned in paragraph 2.1).

Air quality below ground, an environmental priority, is subject to a continuous action plan (see paragraph 2.1 for more details):

- a continuous monitoring network in several metro and RER (regional train) stations;
- punctual measurements at various locations in the underground network;
- improving air circulation inside stations;
- modernising the train fleet.

MANAGING AND PROCESSING ENVIRONMENTAL RISKS

The general delegation for risk management supports departments and subsidiaries with the preparation of their risk maps. Environmental risk reduction plans and specific commissions have been created.

RESOURCES DEDICATED TO PREVENTING ENVIRONMENTAL RISKS AND POLLUTION

- An RATP laboratory accredited by Cofrac (French accreditation committee).

- A toxicology unit within the occupational health service.
- A network of internal auditors for ISO 14001; ISO 9001 and OHSAS 18001.
- A safety advisor for the transport of dangerous goods and technical references (classified sites, noise and vibrations, air quality, electromagnetic compatibility).
- Periodic audits in RATP Dev subsidiaries: energy audits (at Cilia Italia and in the United Kingdom, in the context of the ESOS – Energy saving opportunity scheme), noise audits (in the LUB workshop at London), water consumption audits (measurements are taken twice annually to check the quality of the water discharged for Gest in Florence) and annual audits led by a State-approved body at BOC in South Africa.
- An integrated safety/quality prevention policy at BOC.

SITES WITH AN ENVIRONMENTAL CLASSIFICATION

The parent company operates ICPE (sites with an environmental classification) likely to trigger various risks: fire, explosion, noise, miscellaneous pollution. ICPE are listed as per the nomenclature of classified sites, based on the quantities and dangerousness of the substances used or stored on a site, and depending on the environmental risks inherent to site activities. At the end of December 2016, the parent company operated 169 ICPE at 63 sites. The ICPE map particularly covers: maintenance workshops, cleaning activities, refuelling stations at bus depots, undercover warehouses and storage activities, heating, charging accumulators (including charging electric vehicles), carpentry workshops and mechanical metalwork, etc.

ELECTROMAGNETIC FIELDS

An electromagnetic fields Commission monitors health, regulations and technology to keep electromagnetic radiation under control in RATP spaces. With the general availability of 3G/4G on the Paris regional network, rules have been defined with operators to reduce the exposure of passengers and personnel in each station and tunnel as far as possible. In 2016, the electromagnetic fields commission attempted to map emissions in compliance with decree 2016-1074 of 3 August 2016 on protecting workers against the risks inherent to electromagnetic fields.

AIR QUALITY BELOW GROUND

This point is expanded upon in the paragraph on preventing air discharges (see paragraph 2.1).

CONSIDERING ACOUSTICS AND VIBRATIONS

This point is expanded upon in the paragraph on considering noise pollution (see paragraph 2.3).

MAJOR RISK OF FLOODING

RATP was one of the first operators to draft its own flood protection plan (PPCI). This plan has been established as a regulation and was officially recognised and validated by the Prefect of the Region in January 2015. This plan aims to prevent water entering its networks. From 7 to 18 March 2016, the company participated in the simulation of a 100-year flood, known as EU Sequana 2016. This



event was organised by the Paris police authority with the support of the European Union in terms of preparation and financing. RATP took this opportunity to test its flood protection plan (PPRI) at scale 1 and in real time. In June 2016, the company also had the opportunity to test its PPCI in actual conditions when the Seine river flooded, and to launch the planned actions, particularly by creating a crisis unit on 1 June, and opening the crisis communications headquarters on 3 June. Although the water level reached (the highest in the last thirty years) had little impact on the network and it did not prove necessary to protect network infrastructures, this event allowed the company to apply a healthy proportion of its PPCI and obtain detailed feedback, both in-house and from its main partners (Zone de défense, Ville de Paris, SNCF, etc.).

WORKS WITH A LOW ENVIRONMENTAL IMPACT

The company acquired a guide to “*Mise en place d’une démarche de chantier à faible impact environnemental*” (Organising works with a low environmental impact). This guide can be used to prevent environmental risks and identify solutions prior to works phases. In 2016, a regulation on works with a low environmental impact was applied to the extension of line 4 to Bagneux (Hauts-de-Seine) and when extending tramway T1 to Val-de-Fontenay (Val-de-Marne). The company carries out environmental audits and inspections for all works: in 2015, the firm signed the 7th protocol on the due execution of works for Paris City Hall.

SEDP implemented a charter on “*Chantier à faible impact*” (Low-impact works), intended for the sub-contractors allocated to works and operations, and recorded the environmental principles to be applied to all structures and structural components designed or renovated, in the document on “*Préconisations environnementales SEDP*” (SEDP environmental recommendations).

1.4 PROVISIONS AND GUARANTEES FOR ENVIRONMENTAL RISKS

At end-2016, no significant regulatory requirement obliged RATP group to provide financial guarantees for the main environmental risks mentioned in paragraph 1.3. No environmental reserve has been created by RATP, as no risk has been identified.

2 Pollution

2.1 AIR, WATER AND SOIL DISCHARGES: PREVENTION AND CORRECTION

PROTECTING AIR QUALITY IN THE CITY

Bus2025: in 2014, RATP set itself the ambitious challenge of converting its fleet of 4,600 buses in Paris over to biogas and electrical power via the Bus2025 plan, matching the intentions of the STIF (the public transport authority in Île-de-France). The company aims to ensure a 100% low-emission fleet by 2025: 80% electric and 20% biogas, in line with RATP targets to reduce GHG emissions by 50% (base 2015).

With the same aim to protect air quality in the city, RATP Dev subsidiaries are progressively equipping their fleet with diesel vehicles, satisfying the Euro 6 standard, or hybrid, diesel/electric or biofuel/electric vehicles:

- in France, 40% of the STI Allier fleet satisfies Euro 5 and 6. Two thirds of the Alpbus fleet is fitted with particulate filters;
- in the United Kingdom, 27% of the LUB fleet now comprises hybrid buses (compared with 9% in 2013) and the rest of the fleet is equipped with SCR (Selective catalytic reduction) technology. HR Richmond Ltd will replace its entire fleet with Euro 6 vehicles by 2020, as a key initiative, positioning the subsidiary in the leading pack of urban transport operators in the United Kingdom;
- in the United States, McDonald Transit Associates has started to introduce hybrid and diesel/electric vehicles as part of its fleet.

IMPROVING AIR QUALITY BELOW GROUND

Air quality below ground is continuously monitored at RATP Paris network sites. The results of actions and the annual report for this surveillance have been available on the company website since 2008 (www.ratp.fr). Occasional measuring operations reinforce this surveillance. In 2016, the company launched a scientific board, with the participation of various experts in multi-disciplinary fields, and which can be used to establish an order of priority for the studies implemented by the company. The company also contributed to works led by the general delegation for risk prevention (Délégation générale à la prévention des risques) of the French Ministry of the Environment, Energy and the Sea on harmonising measuring protocols for air quality below ground on the rail network.

Replacing rolling stock with models with high-performance electrical brakes makes it possible to reduce particulate emissions. RATP has invested substantially in creating, replacing and reinforcing ventilation systems for more than a decade, to replace air below ground: €45 million planned between 2016 and 2020.

WATER QUALITY

RATP has equipped most of its industrial sites with a treatment facility for industrial waste water. Auto-surveillance analyses are also performed on industrial discharges at all industrial sites.

This point is also expanded on in paragraph 4.1 on water consumption.

SOIL DISCHARGES

Establishing zero discharges at the Choisy site

In 2012, the maintenance at the Choisy site launched works on its residual industrial water treatment station aiming to significantly reduce its consumption of drinking water by treating and re-injecting industrial water into the maintenance processes via a series of pipes. Water consumption was halved over three years. This project was awarded a prize in the circular economy category at the first edition of the Environment Trophy.

RATP Dev subsidiaries are investing in the acquisition of *ad hoc* industrial equipment; special tanks to hold fluids and lubricating oils (for the Hong Kong Tramways) and double wall tanks for AdBlue⁽¹²⁾ (Cars Perrier). Over and beyond regulatory obligations, several subsidiaries use “green”, solvent-free or soap-based maintenance and cleaning products to avoid discharging pollutants into the soil:

- FlexCité/TAD in France recommends washing vehicles without water, in an ecological manner;
- this year, in the United States, Fullington Auto Bus Company listed an inventory of the chemical substances and products used throughout the company in order to use “green”, environmentally-friendly products.

PREVENTIVE ACTIONS FOR PROJECTS

Preliminary preventive communications are organised for local residents, when planning works, as part of projects managed externally. Potential nuisances (dust, soiled roads, noise, etc.) are analysed in view of preventive actions (truck washing areas, dust watering, fitting of temporary noise walls, etc.). For the Vaugirard works, SEDP used water spray screens to keep dust down and cleaned truck wheels to avoid soiling roads when leaving the worksite. All of the works to extend lines 4, 11 and 12 incorporate a noise and vibration management system, which continuously measures (24/7) noise and vibration levels caused by RATP works. These levels are compared with the values defined in the DCE (declaration of the request for proposals) in real time. Text message and e-mail warnings notifying the corrective actions to be taken are also sent to the various stakeholders in real time.

2.2 NOISE POLLUTION

The strategy of the parent company against noise and vibrations is based on five fundamental principles:

- reducing noise at the source;
- prevention (careful nuisance management);
- launching corrective actions (noise barriers, rail grinding, etc.);
- permanent dialogue with stakeholders (local residents, local elected representatives, etc.);
- investment in research programmes.

COMPLAINTS BY LOCAL RESIDENTS

The increase in the number of complaints by local residents over the last twenty years reflects variation in the local residents’ sensitivity to noise. The parent company processes all complaints received from local residents in the Paris region: infrastructure diagnostics are carried out and noise and vibrations may even be measured in detail at the home of the resident having submitted the complaint.

In 2016, 739 complaints were received. However, this increase was not caused by a significant reduction in the quality of the infrastructures. This increase is more likely to reflect the varying sensitivity of local residents to noise for several reasons (exposure to several sources of noise, total noise levels over the day, socio-cultural effects, downgraded quality of living, etc.). In the same way, increasing

numbers of passengers are paying close attention to the quality of service (ability to understand the messages broadcast, equipment noise, etc.), which is reflected in the type of complaints received this year.

During periods with construction or real estate works, the parent company creates: local steering committees with their teams, companies, elected politicians and local residents, continuous monitoring systems for the noise and vibrations emitted during the works and local Internet sites, designed in cooperation with an integration company working in the field of digital technologies.

Claims by stakeholders in relation to noise and vibrations

	31/12/2016	31/12/2015	31/12/2014
Number	739	734	624

REDUCING NOISE

The parent company implements the following for its Paris regional network in order to reduce noise and vibrations:

- for works: drafting a nuisance management plan, upstream modelling of impacts on works to adapt the working methods and/or techniques used appropriately (hours, processes, communication targeting local residents and local authorities);
- replacing existing rolling stock with models with lower noise levels: the most recent MI09 stock for the RER helps to reduce noise levels by 3.5 dB(A), compared with the MS61, and 1.5 dB(A), compared with MI84 stock;
- fitting specific devices: an anti-vibration mat under ballast in particularly sensitive zones (RER line A, following on from works to replace track ballast);
- and in the context of future projects: carrying out an upstream study of acoustic and vibratory impacts in order to design preventive solutions and avoid downgrading the lifestyle of local residents; close attention is paid to avoiding the creation of a black spot for noise with single or multiple sources.

The company provides the prefects of the departments affected with the classifications of its infrastructures and noise maps drafted as per European directive 2002/49/EC. It also actively contributes to preparing environmental noise prevention plans for the State, municipalities and EPCI (public inter-municipal cooperation bodies) in question.

In 2016, the company allocated €2.3 million to grinding the metro, RER and tramway networks in Île-de-France.

Furthermore, a length of 1,476 metres of anti-vibration mat was installed by the engineering department when replacing track ballast for line A – central section in 2016 + 2 points and crossings at Châtelet – Les Halles (2 x 130 metres).

RATP Dev subsidiaries operating rail networks in sensitive urban zones are also installing or testing anti-noise and anti-vibration systems:

- the Gest subsidiary, in Florence, has launched a lubricating train, with an anti-noise lubricant, and is working with manufacturers to set up other trains on the network;

(12) AdBlue: an aqueous solution used as part of SCR technology to transform NOx, exhaust gases from diesel engines, into nitrogen and water vapour.

- in Algeria, Setram carries out preventive and corrective rail grinding maintenance operations with the Constantine unit to reduce noise;
- in South Africa, BOC has installed noise walls along sensitive areas. Noise levels are measured twice annually to check conformity with local and other standards.

People* exposed to the maximum threshold of EU directive 2002/49/EC

Parent company	31/12/2016	31/12/2015	31/12/2014
Number	354	583	620

* Local residents exposed to the maximum threshold.

In 2016, thanks to the completion of the first section of works to eliminate noise black spots, carried out over four years under a convention signed between Ademe and RATP on a perimeter established by the parent company, the façades (windows, roller blind cases, vents, doors, etc.) of 20 housing units were treated with sound insulation. According to the thermal and acoustic diagnostics carried out prior to the works, focusing on all housing units located in a noise black spot, 49 housing units were already conforming.

3 The circular economy

As a major contributor to the sustainable city, RATP group is part of a circular economy. The company makes an effort to optimise resources by, on the one hand, reducing use, and, on the other hand, creating potential synergies between the various regional operators. This approach is formally recorded in the Group's CSR policy.

In 2016, RATP and Paris City Hall collaborated on the drafting and signing of a partnership agreement on the creation of a "circular" business district in order to meet the priorities of a "smart and sustainable city". This pilot project, known as "Quartier des deux rives" (Quarter of the two banks), will be located at the centre of the 12th and 13th *arrondissements*, between gare de Lyon and gare d'Austerlitz. The aim is to create synergies and "circular economy loops" between regional operators.

3.1 WASTE: PREVENTION AND RECYCLING

For many years now, RATP has applied selective sorting systems for waste on its industrial and tertiary sites, aiming to better manage all waste generated. Approximately 99% of its hazardous waste and 100% of its non-hazardous waste is currently re-used.

Waste sorting and management (recycling metal, WEEE⁽¹³⁾, etc.) represent one of the structural lines of the environment policy of RATP Dev subsidiaries: in the United Kingdom, Bournemouth Transport Ltd drafts monthly reports on the percentage of materials recycled. In Algeria, Setram has launched a QHSE (Quality, health, safety and the environment) waste management system.

RE-USING WASTE

RATP sorts and re-uses the waste generated at its industrial sites and on worksites, per category: hazardous waste (oils, solvents, soaked cloths, aerosols, etc.), non-hazardous waste (wood, cardboard, rubber, metal, etc.) and waste from its tertiary sites (paper, cardboard, WEEE, cartridges and toner, plastic caps, etc.).

Since 2014, the Group's head office has sorted and dehydrated food waste from catering services, as part of the introduction of the French environmental code from decree no. 2011-828 of 11 July 2011. The bio-waste generated is collected by a specific service provider.

The company is considering the option of extending the sorting of bio-waste to the main company restaurants. Subsidiaries are also launching a plethora of initiatives on the same basis:

- in France, TIM Bus (Magny-en-Vexin urban transport operator) sorts paper via a Recy-go contract⁽¹⁴⁾, recovers used fuel cells and jointly collects plastic caps;
- in the United Kingdom, Bournemouth Transport Ltd has been carrying out a global recycling operation Waste not, Want not, for the last two years. This operation covers all aspects of a circular economy (this point is expanded on in paragraph 2.4.2);
- in the United States, McDonald Transit Associates uses transformed, recycled or revised parts or articles, rather than new parts, whenever possible in terms of quality and safety;
- Promo Métro organises selective sorting and re-uses cardboard waste from network shops.

RECYCLING UNIFORMS

When replacing the uniforms of 27,000 field employees, the parent company launched a collection and re-use solidarity system for old uniforms via a company helping to integrate people into work, Le Relais de Soissons managed by Emmaüs France. This is a key environmental priority, as in France only 15% of textile waste is recycled. Thanks to this operation, 26 metric tons of textile waste was collected, including 87% for re-use (as fabric).

Tertiary and industrial sites with selective sorting systems

	31/12/2016	31/12/2015	31/12/2014
Number	160	163	145

Small entities are excluded, as these sites are not considered as representative of tertiary activity.

Non-hazardous waste (total quantity)

Non-works	31/12/2016	31/12/2015	31/12/2014
Tons	15,775	16,453	24,415

Hazardous waste (total quantity)

Non-works	31/12/2016	31/12/2015	31/12/2014
Tons	5,471	5,347	4,275

All waste generated by the parent company is re-used in terms of either material or energy.

(13) Waste electrical and electronic equipment.

(14) Recy-go: a paper collection service proposed by La Poste group.

3.2 FOOD WASTE

The comité régie d'entreprise (CRE – corporate governance committee), in charge of catering for the parent company, is part of a sustainable development process, limiting the impact of its catering activities on the environment.

In 2016, a charter on general operations, integrating sustainable development requirements, was signed between RATP and the CRE. From 2017, this will lead to:

- a formal plan against food waste;
- a study on the implementation of initiatives to manage and reduce energy and water consumption;
- monitoring and reporting focusing on bio-waste sorting for restaurants already equipped, and those with refurbishment underway.

Promo Métro, a subsidiary, already requests that commercial stores donate unsold food products to associations.

4 Sustainable resource use

Sustainable resource use is an integral part of the environmental performance of RATP group. When combined with the circular economy, the aim is to produce services while limiting the consumption and waste of raw materials, water and energy sources. Awareness campaigns are regularly organised, focusing on the responsible use of environmental resources, targeting personnel on industrial and tertiary sites.

4.1 WATER: CONSUMPTION AND PROCUREMENT BASED ON LOCAL LIMITATIONS

RECOVERING SEEPAGE WATER

The parent company is seeking out options for using seepage water or dewatering water to some benefit. Some of this water is returned to the natural environment (Seine, Saint-Martin canal and Saint-Denis canal) to avoid sending good quality water to the treatment unit. Some is re-used by the company: e.g. to water the lawns of tramway T3b. In November 2016, the company signed a partnership agreement with Eau de Paris (Paris water operator) as part of a study on the re-injection of dewatering waters into the Paris non-potable water network.

RECYCLING WASHING WATER

Some rail network treatment units are equipped with recycling systems. Since 2012, the new maintenance and storage sites (SMR) for tramways in the Paris region have all been equipped with a water recycling system, which can considerably reduce water use. Water consumption represents a fundamental priority for RATP Dev subsidiaries:

- in 2016, in the United Kingdom, LUB fitted all of its washing machines with a water recycling system;

- in the United States, McDonald Transit Associates has revised its washing system to maximise the water recovered, and Fullington Auto Bus Company has reduced the washing cycle for school buses as far as allowed by contractual commitments (i.e. once weekly);
- in South Africa, the daily recycling system for train washing waters allows BOC to re-use the water for at least six months.

Sites equipped with a water recycling system

	31/12/2016	31/12/2015	31/12/2014
Number	64	68	51

For the year 2016, the water consumption indicated for the parent company corresponds to water consumption according to the invoices received up to 31 January 2017.

Total water consumption for a public network (all uses)

	31/12/2016	31/12/2015	31/12/2014
m ³	1,196,071	1,186,106	1,207,034

4.2 RAW MATERIALS: CONSUMPTION AND ACTION TAKEN

RATP group is committed to promoting an eco-design and eco-specification policy for all of its projects (infrastructure, building, rolling stock and information system), by encouraging the selection of low-energy products and systems, those with longer lives or better economic performance, via its CSR policy. Industrial sites and units are designed to minimise environmental impacts. Environmental specifications apply when purchasing rolling stock.

The parent company is committed to a global policy to reduce the consumption of raw materials in logistics processes. The ISO 14001 certified logistics platform of Boissy-Saint-Léger is reducing its consumption of raw materials.

In terms of subsidiaries, the achievements of SEDP satisfy all energy performance criteria and Promo Métro has already introduced an environmental criterion into requests for proposals (LED lighting, display cooling, etc.). This criterion represents one third of the total score.

ECO-DESIGN POLICY

The parent company has launched a reference document for the integration of sustainable development in all project phases:

- searching for ecological solutions from the project design phase;
- eco-responsible construction, with works having a low environmental impact, during the works phase;
- structure maintenance, during the operating phase: adapting temperature to seasons, using specific materials, collecting rainwater, green roofs, photovoltaic panels, etc.

The subsidiary SEDP systematically proposes:

- for projects with delegated project management: an eco-design policy aiming to reduce the environmental impact of structures over their life cycle via HQE BREEAM or LEED⁽¹⁵⁾ certifications; integration of an assistant project manager for environmental quality for all projects with delegated project management and a basic programme for all designed or renovated structures, in a document *Préconisations environnementales SEDP* (SEDP environmental recommendations);
- for tertiary premises: environmental specifications for light work materials, including A+ materials for air quality and NF certified or European Ecolabel materials.

At RATP Dev, Céobus in Vexin has completed the construction of an eco-designed depot, including: a recovery and treatment system for bus and coach washing water, underground storage tanks for lubricants and green patios.

“PAPER POLICY”

The parent company recognises the negative environmental impact of non-eco-responsible paper and applies an eco-responsible “paper policy” by reducing consumption, and improving eco-responsibility while ensuring personnel awareness. The parent company opts for the use of environmentally-friendly paper and communications media, whenever possible, by using recycled, PEFC (Programme for the endorsement of forest certification) and/or FSC (Forest stewardship council) eco-label paper at all opportunities. In 2016, the parent company called on the services of Riposte Verte to strengthen its “paper policy” targets and actions. Around 4,000 participants responded to the individual survey available on line via the intranet.

Close-up on the Waste not, Want not operation in Bournemouth

The subsidiary Bournemouth Transport Ltd (Yellow buses) has applied a Waste not, Want not recycling operation for the last two years. This operation covers all of the aspects of a circular economy (environmental, social and societal). The aim is to improve partnership and solidarity-based relationships with companies and local associations regarding recycling collection points, etc., while limiting waste in the first place. Non-hazardous waste was recovered by other charities this year (mobile telephones by Local Air Ambulance, shoes by the Variety Club, etc.).

4.3 ENERGY CONSUMPTION AND USE OF RENEWABLE ENERGIES

Public transport consumes relatively little energy per passenger transported. A passenger journey via the metro or RER network requires eight to ten times less energy than the same journey by passenger car; and a third of that by bus. Despite this, the parent company has committed to reducing its energy consumption by 20% by 2025 and its GHG emissions by 50% per passenger-kilometre compared with the reference year 2015. To achieve this, the Group is substantially modernising its rail equipment and rolling stock.

MODERNISING THE TRAIN FLEET

Modernising the rolling stock is a significant source of leverage for improving energy consumption. The modernisation process for the Paris metro rolling stock continued in 2016: after lines 2 and 5, metro control system 2001 (MF01) was fitted throughout Paris metro line 9.

RER line A rolling stock is also continuing to be modernised, with interconnection control gear 2009 (MI09).

RECOVERING BRAKING ENERGY

Braking energy regeneration is a major source of leverage for reducing energy consumption for rail rolling stock. With regenerative electrical braking, the electric motor acts as a generator, recovering kinetic energy from the vehicle and converting this energy into electricity. The energy regenerated can be used to supply vehicle auxiliaries or even another nearby train.

The performance of electrical braking at low speeds is being improved for MF01 equipment, on lines 5 and 9. This improvement involves optimising the energy regeneration system for electrical braking, down to very low speeds (initially defined as 15 km/h, the threshold for switching to the mechanical brake has been reduced to 3 km/h), reducing the squealing noise whenever the train stops, total energy consumption, the emission of fine particulates and wear to brake pads.

LED LIGHTING FOR 100% OF STATIONS

In May 2016, one year ahead of schedule for the replacement of bulbs in stations, RATP became the first large historical network to convert to 100% LED lighting in all of its stations. Thanks to the replacement of 250,000 lights, electrical consumption will be reduced by 50%, as well as the associated greenhouse gas emissions.

RENEWABLE ENERGIES AND REGENERATIVE ENERGIES

The parent company systematically studies the potential use of renewable or regenerative energies from the design phase of projects, or for major renovation projects. To give just one example, RATP has fitted solar panels at several of its industrial sites. The option of installing solar panels is studied on a case by case basis, depending on site needs, and the orientation of the building. To date, RATP has installed approximately 1,500 m² of solar panels at its facilities.

(15) BREEAM: environmental assessment method – LEED: Leadership in energy and environmental design.

RATP DEV: SUITABLE ACTIONS FOR THE SITUATION IN THE FIELD

- Open Tour in Paris organised a large-scale bus maintenance operation (adjusting engines, adding additive to fuel and reducing kilometres travelled to take up duty by creating local storage areas in inner Paris [*intra-muros*]). These remote car parks have led to a saving of 550 metric tons of CO₂, 120,000 km and 70,000 litres of diesel. In 2015, the subsidiary also installed eco-driving gearboxes in one third of its fleet, which reduced fuel consumption by 5%.
- FlexCité 94 tested an electric vehicle for the people with reduced mobility (Electron II TPMR) in partnership with the bodywork manufacturer, Gruau. These trials demonstrate the Group's aim to establish its position as a pioneer for sustainable mobility, and the mobility of people with reduced mobility in particular.
- TVM (Transports des voyageurs du Mantois – Mantois passenger transport firm) launched 11 hybrid buses while expanding its services (by +20%), reducing its diesel consumption by over 15%.
- TP2A has saved 70 metric tons of CO₂ per year by using four electric vehicles to replace drivers.
- CTLB (Compagnie de transport du Lac du Bourget) monitors the consumption of energy and primary materials. This approach is accompanied by a programme allowing personnel to participate in the savings generated.
- In the United States, McDonald Transit Associates analysed full costs. Out of a total fleet of 250 vehicles, Fullington Auto Bus Company acquired six new coaches and thirteen school buses, all low-energy models: 28 litres/100 instead of 43 litres.

Close-up on Drivell project in London

LUB has launched a telematics system providing real-time information on driving performance to drivers. Goals: improve driving standards and thereby improve the passenger experience, as well as fuel consumption. The outcome is particularly encouraging, with fewer accidents, less downtime for buses at depots, and fewer CO₂ emissions.

Total energy consumption

	31/12/2016	31/12/2015	31/12/2014
GWh	3,367.51	3,387.36	3,009.21

Breakdown of energy consumption by usage as a %

In kWh (to calculate %)	31/12/2016	31/12/2015	31/12/2014
Rail powertrains	33.6	34.6	37.5
Bus powertrains	46.0	45.4	40.7
Buildings	20.4	20.0	21.8

Total energy consumption dropped by approximately 1% in 2016, compared with 2015, for the parent company, RATP. This reduction is attributable to the decrease in energy consumed by rail and bus powertrains, notably thanks to the upgrading of rolling stock for line A and metro line 9.

4.4 GROUND USE

Reminder of methodology: in this case, ground use also refers to the allocation of grounds. The actions carried out in this field only refer to the parent company, as Group subsidiaries do not own the site land.

By transforming industrial sites into “integrated” living areas, RATP has the opportunity to invent new urban shapes and confirm its position as a major player in the city. Modernising the real estate assets of the company and adapting these assets to the growing operating requirements of the network are priorities for the future development of cities. Numerous restructuring projects for industrial sites in Paris have been implemented in recent years, reflecting the company's expertise in urban integration and helping to refresh areas and ensure social mixing in the different districts. In Île-de-France, over 3,200 housing units will be constructed by 2025, including over 2,100 council housing units, with the associated public facilities.

Both of the following two projects represent examples of the functional mixing and urban integration policy applied by RATP, jointly with Paris City Hall, as they allow the company to both expand its production resources and optimise its industrial footprint by combining employment, accommodation and equipment.

ATELIERS VAUGIRARD (WORKSHOPS)

The plans for the Ateliers Vaugirard include the creation of a street, council housing, a childcare facilities and park areas. Protecting the environment is at the heart of the project in terms of energy performance, landscaping and low-nuisance works. The programme for 440 new housing units was designed by teams of architects, landscapers and specialists in sustainable construction. The housing units are Habitat et environnement (Housing and environment) certified and all areas used for business purposes will comply with the NF standard for tertiary buildings and the HQE policy.

ATELIERS JOURDAN-CORENTIN-ISSOIRE

The planned Ateliers Jourdan-Corentin-Issoire, near Montsouris park and boulevard Jourdan, is also part of this vast modernisation and extension plan for industrial RATP sites in Paris. The aim is to help to refresh the area and promote social mixing. This large-scale project will cover a surface area of around two hectares: from 2017, it will include the new bus centre in the basement and equipment and 650 housing units in the upper building. The building will also be home to a 500 m² urban agricultural project.

5 Climate change

5.1 SIGNIFICANT SOURCES OF GREENHOUSE GAS (GHG) EMISSIONS

The parent company carries out an updated audit of its GHG emissions every three years. The audit includes measurements of direct and indirect emissions attributable to company operations. It corresponds to scopes 1, 2 and 3 of the Bilan Carbone® method. The audit was conducted in 2015 (reference year: 2014), and demonstrates that the energy consumed in passenger transport (powertrain energy) and by building systems are the most significant sources of GHG emissions for RATP. Both sources represent approximately

75% of GHG emissions from parent company operations. The remaining 25% of GHG emissions is mainly attributable to purchases (13%), business trips and staff travel between home and work (9%).

The audit on GHG emissions carried out in 2015 indicated a 10% reduction in GHG emissions for energy consumption per passenger-kilometre over the period 2004-2014. This outcome is great news, and the direct result of the dynamic energy policy applied by RATP.

RATP group is continuing with its efforts to continuously improve the energy efficiency of its transport systems and establish its position as a benchmark for the design and use of low-emission transport systems.

BUS2025: BUS MODE FOR CITIES OF THE FUTURE

On 30 May, the first standard 100% electric bus was launched on line 341 in Paris between Charles de Gaulle – Étoile and Porte de Clignancourt. The integration of this initial 100% electric bus represents a cornerstone in the energy transition for Île-de-France buses decided by STIF, the public transport authority in Île-de-France, and enshrined in the Bus2025 plan (see paragraph 2.1).

TOT in London tested a post-treatment system for exhaust gases on a bus, suitable for ULEZ (Ultra low emission zone) in the hyper-centre of London.

Close-up on Staff transport in Bournemouth

Bournemouth Transport Ltd opted to launch an alternative mobility project, Staff transport, for its employees (involving bicycles, cycle lanes, bus services and the installation of showers) rather than create additional parking slots. This initiative helps to reduce GHG emissions, and was rewarded in the first edition of the Environmental Trophy.

DEVELOPING AN URBAN MOBILITY ECOSYSTEM

Thanks to its experience and position as leader on the Paris mobility market, RATP group can offer mobility services to complement public transport as part of a general programme known as “Porte à Porte” (bicycles, TAD⁽¹⁶⁾, car-sharing, etc.). The goal of this programme is to help to reduce the dependency on private cars of those living in the Paris region. The following are just a few of the services currently available:

- 600 bike parking slots with open air racks;
- 1,290 secure parking slots for bicycles with collective lockers, available for a subscription fee, in the immediate vicinity of bus and train stations.

Plans for new metro stations incorporate eco-mobility, with the creation of multi-modal information zones to simplify and optimise travel for customers.

(16) Transport on demand.

(17) CO₂ Target charter: created in 2012 by Dreal (regional division for the environment, urban planning and housing) and Ademe (French environment and energy management agency) based on four voluntary commitments for reducing CO₂ emissions.

AUBERVILLIERS – LINE 12 WORKS

When extending metro line 12 to Aubervilliers, the nearby Saint-Denis canal was used to transport materials and backfill by inland waterway, as part of the environmental policy for the works. This approach saved between 40,000 and 50,000 return trips by truck, considerably reducing surface nuisances.

CO₂ TARGET CHARTER

STDM (Société des transports départementaux de la Marne – Marne departmental transport firm), Champagne Mobilités and STI Centre subsidiaries signed the road transport CO₂⁽¹⁷⁾ Target charter for another three years. STI Centre has obtained approval for its particulate filter system in this context.

In 2016, RATP group’s GHG emissions increased substantially for buildings (+16%) and dropped substantially for powertrains (–1%). This variation is partly attributable to the changing scope of the subsidiaries.

At parent company level, the carbon efficiency of rail, metro, tramway and RER transport modes is stable compared to 2015. This figure represents 3.6 g of CO₂ per passenger-kilometre on average. In comparison, GHG emissions for car journeys represent 162 g of CO₂ per passenger-kilometre on average.

Greenhouse gas emissions from buildings*

	31/12/2016	31/12/2015	31/12/2014
Metric tons of CO ₂ equivalent	111,937.0	99,249.7	93,636.0

* See the note on methodology.

Greenhouse gas emissions from powertrains*

	31/12/2016	31/12/2015	31/12/2014
Metric tons of CO ₂ equivalent	618,031.0	623,948.0	521,861.0

* See the note on methodology for the Group indicator excluding the subsidiary, OVS (Orlyval Service).

5.2 ADAPTING TO CLIMATE CHANGE

RATP is affected by climate change at various levels: managing the rail infrastructure network, operating and maintaining a transport system (passenger transport, stations, information and communications systems), purchasing bus and rail rolling stock and designing new infrastructures (building or rail infrastructure).

The major climate risk corresponds to the flooding of underground networks. The parent company has therefore launched a diagnostic focusing on vulnerable aspects of networks due to groundwater.

MAJOR RISK OF FLOODING

This point is covered in detail in the section on means of prevention for environmental risks (see paragraph 1.3).

RATP DEV PREVENTION PLANS

RATP Dev subsidiaries apply prevention plans, which are suitable for the degree of severity of local climates: from the risks of snow or flooding (France and the United Kingdom, with specific winter plans) to the risks of tornadoes or typhoons (in the United States, in China and Hong Kong).

The Salève cable car operator (STS HelvéCie) has fitted an electronic surveillance system able to determine the right operating conditions for the cable car. In Algeria, RATP El Djazair has fitted anti-flooding doors on a potentially floodable section of metro line B.

6 Protection of biodiversity

RATP is systematically analysing existing assets (infrastructure and buildings) to consider the possibility of adding green areas and integrating urban agriculture through the completion of completing existing green areas.

RATP supports the target set by Mairie de Paris (Paris City Hall) to create 100 hectares of green roofs and walls, including 30 dedicated to urban agriculture by 2020. Under the protocol signed with Paris City Hall to create 2,000 housing units, SEDP has reserved 40,000 m² for green roofs and gardens, of which one third will be dedicated to urban agriculture.

- The tertiary sites of the parent company (head office, Noisiel and Neuilly-Plaisance) are covered with 4,000 m² of green surface area, cared for without phytosanitary products by an Esat. Planning projects for industrial sites incorporate large green areas: 65% for the redevelopment project for the Ateliers Vaugirard.
- At the head office, the company has installed an urban agriculture demonstrator covering 200 m², in partnership with AgroParisTech university (Institute for life and environmental industries and sciences). The company tested eco-grazing, an alternative management technique for green areas aiming to reduce the use of machinery, alongside the tracks of RER line B.
- Céobus fitted a green protection barrier at the site entrance, with local species from a list authorised by Vexin français regional park. This project covers both landscaping and CSR as it contributes to the well-being of employees, as well as enhancing visual comfort.
- Setram bees: five hives have been installed at the Constantine depot site. This eco-responsible project is a local initiative aiming to take real environmental action by helping to protect biodiversity.
- BOC has launched an action plan against invasive plants and to establish local plants adapted to the South African climate, following on from the main lines defined in the Biodiversity act of the EMP (Environmental management plan).

SOCIETAL INFORMATION

In terms of the impact on the regions and stakeholders, the Group refers to the principles of corporate ethics and civic ethics described in its code of ethics, which notably guarantees that its practices comply with the applicable rules in terms of relations with sub-contractors and suppliers.

1 Regional, economic and social impact of Group activities

Developing and improving public transport effectively contributes to the economic and social development of a region, enhancing its attractiveness (for companies, shops and tourism). Every single euro invested in public transport generates up to five euros via knock-on effects in the rest of the economy⁽¹⁸⁾.

1.1 REGIONAL DEVELOPMENT AND EMPLOYMENT

As a major contributor to the regional and national economy, RATP provides employment and economic development in its geographic segment. In addition to its 45,000 employees in Île-de-France, the parent company generates jobs via its purchases, throughout the entire chain of suppliers from rank 1 to n. In 2016, purchasing expenses representing €2,562 million (*versus* €2,605 million in 2015) reflected 24,652 direct jobs, of which 65% in Île-de-France and 20% in the construction sector. If we consider the impact of these wages (consumption and taxes), this represents 43,988 indirect and induced jobs, supported by purchases (*versus* 42,658 in 2015).

Indirect employment*

	2016**	2015
Number of indirect jobs created by purchases (turnover invoiced)	24,652	25,738

* This indicator incorporates data from SEDP, the real estate management representative.

** Methodology was changed in 2016.

The RATP group Foundation also contributes to the economic and social dynamics of the regions, by supporting the projects of associations focusing on access to education, access to culture and employment, and entrepreneurship, aiming to help remove the obstacles preventing fragile groups from fully participating in life in the city. In terms of employment and entrepreneurship, 20 agreements have been signed with 65 associations, to the benefit of almost 13,000 individuals⁽¹⁹⁾.

Towards the end of 2016, the Foundation and Adie (Association pour le droit à l'initiative économique – association supporting economic initiatives) were awarded the “Solidarity” category at the ABNL Non-Profit Awards⁽²⁰⁾ for their joint action to support those struggling to find employment in view of boosting business. This award is the reward for a partnership launched in 2012, which benefited a dozen geographic segments in 2016, covering the areas where Adie and RATP and its subsidiaries are established⁽²¹⁾.

(18) Source: *Le transport public crée des emplois verts et favorise une croissance inclusive* (Public transport: creating green jobs and stimulating inclusive growth), international association of public transport (UITP), January 2013.

(19) On 31 October 2016.

(20) The ABNL Non Profit Awards are organised as part of the “À But Non Lucratif” (BFM Business) programme dedicated to companies launching civic, solidarity or humanitarian initiatives. These awards recognise general interest actions jointly managed by companies and associations, NGOs or foundations.

(21) Thanks to this partnership, over 140 individuals have been able to obtain support for their plans to create a company since 2012. In 2016, an additional 40 micro-entrepreneurs received support in Valenciennes, La Courneuve and Créteil. Furthermore, a room provided for use by Adie, by RATP, in 2015, at the Gallieni metro station, has been used by a dozen micro-entrepreneurs to prepare for managing a shop *in situ*, by displaying their products in the temporary boutique – le Quai des créateurs – also installed at this address.



1.2 ON LOCAL RESIDENTS AND POPULATIONS

As a major player in the lives of the regions it serves, RATP group contributes to general social well-being and organises initiatives in relation to societal matters.

In terms of housing, RATP has applied a voluntarist policy for the last twenty-five years, notably through its real estate subsidiaries, SEDP (developer) and Logis-Transports (social housing firm). While modernising its sidings and maintenance workshops, RATP also transforms these premises to create council and private housing units, public spaces and offices, mixing usages and populations and confirming its position as a major contributor to a sustainable city, above and beyond its key role in mobility. Early 2016, RATP opened a semi-underground bus centre in Paris, as part of a real estate project including 30,000 m² in raised offices, the extension of a nearby school and a crèche. Under the protocol signed with Paris City Hall in 2014 to create 2,000 housing units in Paris⁽²²⁾ by 2024, preparatory works have started at the site of the Vaugirard maintenance workshops (line 12), one of the eight industrial sites already identified. This project will ultimately lead to the creation of 500 housing units, including around a hundred council housing units and a child care facility. Architectural competitions have been organised on two more of these sites.

The parent company has applied a policy of assisting those facing exclusion on the Paris regional networks for more than twenty years. A dedicated operational structure, social gathering, contact with these individuals and redirecting, should they so desire, to host structures. In 2016, RATP also renewed the agreement signed with Emmaüs Solidarité on the daytime host structure located at Charenton-le-Pont, which has hosted around 1,000 people facing serious exclusion since it opened mid-2014.

RATP maintains its commitment to reducing violence against women, reflecting the fifth governmental plan in this field. As part of the action plan launched in 2015, RATP has reinforced its warning systems by creating a dedicated hotline, jointly with SNCF, and helping to advertise the reporting application, "Handsaway", via the RATP Apps platform and its Facebook page. Finally, RATP joined a working group with the inter-ministerial mission for the protection of women from violence and the fight against human trafficking (Miprof) working on the preparation of a training module on violence against women, targeting personnel in contact with the public, from their initial training. Personnel at stations will receive this training, as will GPSR⁽²³⁾ operators in the near future.

Finally, the Foundation supported 503 projects to the direct benefit of 42,148 individuals in 2016⁽²⁴⁾ in the geographic segments covered by the Group. These projects are generally led by structures created by inhabitants or by cultural or educational establishments organising an active support policy for underprivileged districts. In 2016, all partnerships on access to culture and study grants were renewed for periods of three to four years. New associations have also received support, such as the federation for specialised groups of musicians and singers (Fevis) for its project focusing on access to music culture for 1,000 high school pupils in Pas-de-Calais, or Labo des histoires, which introduced 35,000 children and young adults to writing.

(22) Including at least 50% council housing units.

(23) Network safety and protection group (Groupe de protection et de sécurité des réseaux), internal RATP security services.

(24) On 31 October 2016.

2 Relations with stakeholders

2.1 CONDITIONS FOR DIALOGUE WITH THESE STAKEHOLDERS

2.1.1 INSTITUTIONS

Relations with institutions, particularly public transport authorities, represent an intrinsic part of transport carrier's activity. RATP group pays close attention to these relations in the countries and regions where it operates networks. To this end, the parent company is supported by six territorial development agencies in Île-de-France. These agencies work in cooperation and maintain a permanent dialogue with institutions.

At parent company level, relations with STIF are governed by a five-year contract, which provides for the achievement of quantified targets in relation to the quality and range of services, with potential gains/losses.

These relations go beyond contracts. In 2016, RATP actively contributed in a consultation regarding bus services in the Grand Paris des bus, launched by the Île-de-France region and targeting the public. This consultation process, which involved public authorities, associations and mobility operators, targeted two factors: restructuring the Paris bus network and launching an improvement plan at regional level. This part was completed at the end of last year. On this occasion, the Group published a list of operators, to present its vision of the buses of the future, and its aim to offer transport services to match the mobility priorities of the region, continuing the brainstorming process started by the parent company in 2014 as part of the Bus2025 project.

According to RATP Dev, the type of relations maintained with institutions depends on the terms of contracts, which vary between countries, particularly regarding the sharing of industrial and commercial risks. Subsidiaries discuss matters with local authorities and actively contribute to transport debates, maintaining dynamic relations with regional authorities. In 2016, these discussions led to the consideration of the restructuring of the bus network connecting to the tramway, by Setram, in cooperation with the Oran transport division.

2.1.2 PASSENGER ASSOCIATIONS

Listening to passenger associations is a key priority for RATP group and the Board of Directors, which includes two representatives of associations.

In the Île-de-France region, an agreement signed in 1996 created a body for continued discussion with approved associations. The topics discussed are defined based on the preferences of the associations and RATP; an annual report on works is drafted. In 2016, around thirty subjects were covered, based on an open-minded approach to discussion, encouraging the participation of all. Strategic matters were discussed, particularly the change in travel habits and intermodality between now and 2025, with references to large-scale projects (extending lines 14 and 12) and considering day-to-day matters, such as passenger information systems, changing customer services, regional management and clean spaces.

Furthermore, the representatives of approved national consumer associations are part of the parity panel, which appoints the RATP mediator. The latter's role was reinforced under order no. 2015-1033 dated 20 August 2015 on settling consumer disputes out of court. Since January 2016, the RATP mediator holds competencies for all of the Group's French subsidiaries in charge of public transport and may be contacted directly on line via a new website (http://www.ratp.fr/fr/ratp/vch_124175/mediateur).

In terms of relations with customers, some subsidiaries maintain exclusive contact with the public transport authority, while others maintain more direct relations, via passenger panels, user or neighbourhood committees, and consumer associations.

The Group also maintains contact with passengers via social networks. In Île-de-France, Twitter accounts have existed for all of the metro, RER and tramway lines operated by RATP since 2014. A dedicated customer service account rounds off this digital array. Subsidiaries are increasingly using Internet themselves – particularly to respond to claims more efficiently – as well as social networks, to strengthen close relations with passengers (STS, Vienne Mobilités, Champagne Mobilités, STDM, Gest).

2.1.3 ENVIRONMENTAL ASSOCIATIONS

A representative of the parent company is a member of the Board of Directors of Airparif, an approved air quality monitoring network in the Paris region, and is also a member of Bruitparif (noise observatory for Île-de-France). RATP also cooperates with Ademe. Since 2010, RATP has been committed to reducing the noise black spots identified in the municipalities of Arcueil, Cachan and Gentilly. Its experts stay in contact with the local residents affected by noise or vibrations. RATP is also bound by four-way agreements (region, *conseil général* [departmental council] and municipalities) to promote sustainable mobility in Île-de-France. These aspects are covered in the environmental chapter of this report.

2.1.4 ASSOCIATIONS REPRESENTING THE DISABLED AND PERSONS WITH REDUCED MOBILITY

In accordance with the 2005 law on equal rights and opportunities, the participation and citizenship of the disabled, RATP group has continued to ensure the accessibility of its bus and RER⁽²⁵⁾ networks: 100% of RATP Paris tramway and bus lines, 70% of suburban bus services, metro line 14 and 63 out of the 65 RER stations are now accessible for persons with reduced mobility. In parallel, the parent company applies a service policy covering equal access to transport. The 27,000 employees of the parent company in contact with customers are trained to meet the specific requirements of persons with reduced mobility (PRM).

The parent company manages continued cooperation with the representatives of the disabled, aiming to ensure continuous improvements

on the basis of a coordination protocol concluded with nine associations representing the different types of disability⁽²⁶⁾.

In 2016, the Group launched Equisens, an ambitious urban planning project for metro and RER spaces, aiming to allow people with sensory disabilities to move around safely and independently. The project covers the 365 metro and RER stations operated by RATP and particularly involves fitting tactile warning indicators on over 3,500 staircases and step coping. Other refurbishment operations are planned, with regards to the audio identification of metro and station entrances, signs, lights and acoustics to improve access to visual and audio information.

Furthermore, the S3A (greetings, support and accessibility) label approach, which reflects a commitment to greeting and informing the mentally handicapped, has continued for RER lines A and B. Educational support is available in the field, targeting personnel in contact with passengers, adding to the series of animated films "Accessible ensemble". End-2016, another film was produced to remind bus drivers of how to handle the persons with reduced mobility in an appropriate manner.

Most of the Group's French subsidiaries maintain regular contact with the various associations for PRM (APF, Jaccede.com), in coordination with the parent company, as part of an across-the-board policy to promote discussion and share contributions. Thanks to this dialogue, initiatives have been launched focusing on several points:

- personnel awareness/training on how to greet and manage PRM (CTY, Moulins Mobilité, STI Centre and TP2A), particularly via the accessibility assignment of the parent company, which deploys this type of system at the request of subsidiaries;
- actions to promote the professional integration of the disabled, by using the services of companies which help the disabled to find work (Esat) and appropriate firms for the disabled (EA), which employ disabled individuals to care for park areas, for recycling services, to supply equipment, and to deliver packages (Céobus, FlexCité TAD and Ixxi), or via various approaches such as introductory courses to help with professional reconversion, or with operational preparation for individual employment for disabled workers or use of Agefiph for *ad hoc* recruitment (STI Centre, STI Allier);
- highlighting the quality of service for Group subsidiaries specialised in transporting persons with reduced mobility, as part of a policy to obtain Qualicert certification⁽²⁷⁾ (FlexCité 92), with a charter on appropriate treatment (FlexCité 94). At the Autonomic fair in June 2016, the Group presented progress in terms of the accessibility of networks and the complementarity of the services provided on the Paris network by RATP with those provided by services specialised in the transport of the disabled, to public authorities, carers, and the disabled themselves.

Abroad, subsidiaries similarly maintain relations with associations in charge of vulnerable groups – whether disabled or elderly – and launch systems to ensure that these groups are managed appropriately on the transport networks: Bournemouth Transport Ltd has launched a series

(25) The Paris metro system is recognised as an exception by legislation.

(26) AMF (French association against myopathy), Allegro Fortissimo (fighting discrimination against the obese), APF (French associate for paralysis), APPT (association for short individuals), Corerpa (regional conference for the elderly and retired), CFPSSAA (French confederation for the social promotion of the blind and individuals with amblyopia), Unafam (French union for the families and friends of individuals with psychic disabilities and/or disorders), Unapei (French union for associations of parents and friends of individuals with mental disabilities), and Unisda (French union for the social integration of individuals with hearing disorders).

(27) Provided by SGS ICS, on the basis of a reference document prepared with L'Académie du Service®.

of internal awareness/training initiatives focusing on mental disorders and signs of senility, in partnership with a specialist association, and internal referral agents have been trained in the field by Bournemouth University; Cilia Italia has improved the accessibility of its bus fleet by acquiring models with access ramps in 2016.

2.1.5 INTEGRATION STRUCTURES AND ASSOCIATIONS

The parent company is multiplying its initiatives with associations and structures working towards professional integration. In this way, RATP targets various integration bodies and active spaces for young people and/or adults, such as local missions, Écoles de la deuxième chance (E2C – second chance schools) or sites helping these groups to find jobs (Epid). In the same line, in 2016, RATP participated in approximately 70 job forums in partnership with local authorities. RATP also continues with its “mobility workshops”, through an educational approach aiming to explain how to use transport (reading maps, understanding of the different types of transport, etc.) to socially-vulnerable groups. The aim is to allow these groups to travel in a more independent manner, particularly when seeking work, thereby simplifying their integration. In 2016, approximately 400 mobility workshops were organised for around 3,500 beneficiaries by parent company employees and around 20 by Agir ABCD or Fondation agir contre l'exclusion (Face – foundation acting against exclusion), as part of a convention. For information, in 2015, almost 300 workshops were led by Group employees, to the benefit of 2,500 individuals.

Subsidiaries are extensively involved and many initiatives have been organised, with various bodies focusing on integration:

- many initiatives are organised with Pôle emploi (French job seekers' office), via various approaches: RATP Dev and Pôle emploi have signed a partnership agreement to simplify the mobility of job seekers starting a new job, extending a policy, which already exists in many French RATP Dev subsidiaries, to all of them. This policy particularly provides for the payment of transport costs by the local subsidiary for job seekers during the first month of their new job. Other examples: STI Centre has established four POE⁽²⁸⁾ sessions, benefiting around 40 individuals, who subsequently found work; Ixxi applied the same approach to highly qualified job seekers, most of whom were subsequently recruited for a permanent contract. Mobilité hosts job seekers for assessments in the working environment;
- several subsidiaries organise actions to promote sandwich courses and apprenticeships, particularly for maintenance trades (Céobus, OVS); other subsidiaries are continuing with a policy for the integration of young people facing difficulties based on professional training contracts, e.g. as conflict prevention staff (CTVMI). STI Nièvre is leading a group of employers targeting qualifications and integration (Geqi) for ambulance staff and coach drivers. This group is planning to extend its scope to removals. Other initiatives are organised with departmental councils for RSA (minimum state allowance) beneficiaries under the unique integration contract (*contrat unique d'insertion* – FlexCité 92), with local missions (TVM⁽²⁹⁾), with interim agencies assisting with integration, integration associations (STI Allier, TP2A) and with Écoles de la deuxième chance (FlexCité 94, Sqybus);

- CTVH contributes to an original initiative with the national theatre in Valenciennes, aiming to give job seekers renewed confidence through artistic creations and by learning metalwork trades;
- as part of the projects it manages, SEDP acts as a facilitator to integrate people out-of-work on a long-term basis;
- on an international basis, programmes for the re-integration of former military staff are continuing at London United Busways and Fullington Auto Bus Company, such as the partnership with Hong Kong Tramways and an association managing new immigrants.

In 2016, the Foundation continued with its local partnerships to promote professional integration. The Foundation is committed to fighting against school dropouts as part of the programme of the Alliance pour l'éducation (Alliance for education), of which it is a member, and supports young people of all ages from priority districts for professional integration initiatives based on sport. The Foundation has also continued to provide support to the association, La Fabrik, and its programme preparing individuals for employment based on drama, in cooperation with the local mission in Bondy, Seine-Saint-Denis.

2.1.6 RELATIONS WITH EDUCATIONAL BODIES

The parent company maintains many partnerships with educational bodies in the context of professional training contracts (CFI Orly, IUT de Cachan, Paris-Est Marne-la-Vallée university, etc.) or through social promotion, in the form of professional training periods (Cesi, Cergy university, Afpa, Aforp, Conservatoire national supérieur des arts et métiers). RATP also works as a partner in professional training courses, alongside other leading groups (SNCF, Eurotunnel, Alstom, Bombardier, Keolis and Transdev): vocational degrees in guided transport maintenance (MTG); organisation and management of maintenance services, a rail Masters Degree from École nationale des ponts Paritech.

In parallel, the parent company hosts approximately 1,500 trainees each year, from year 10 high school up to the Masters Degree and beyond, for all types of trades. This policy of organising internships and sandwich courses allows RATP to introduce its trades and pre-recruit staff, while opening up new prospects in educational guidance for young people. In 2016, RATP focused on pupils in years 10 and 11, with an introduction to trades, with a focus on guiding female pupils.

Finally, under the agreement signed in 2015 with a sandwich training institute, RATP continued its initiatives to introduce maintenance, operations and service trades to apprentices in the industrial systems and technologies sectors.

Relations between subsidiaries and schools focus on several topics:

- compliance with rules on how to be a good passenger, for primary and secondary school pupils, with talks in schools, role play, and the implementation of charters of good conduct (CTVH, CTVMI, Sqybus, STI Allier, STU Bourges, STU Vierzon, TP2A and Bournemouth Transport Ltd);
- road safety and accident prevention: in 2016, TimBus repeated its awareness operation for primary school pupils during the quinzaine des usagers vulnérables (Fortnight on vulnerable passengers). Coach evacuation exercises are also organised, particularly on school lines. In North Africa, actions are organised focusing on the risks inherent to a tramway and its integration in the urban environment, particularly during the back-to-school period;

(28) Operational preparation for work.

(29) In 2016, the Group and the Yvelines departmental council signed an agreement to help the unemployed return to work in Yvelines, with a training and mobility action plan for groups facing difficulties finding work, particularly in partnership with the subsidiary, TVM.

- introduction to transport and maintenance trades: McDonald Transit Associates hosted young people as part of learning programmes in partnership with the town of Charlotte, and trained these participants in the main maintenance trades for diesel stock; similar initiatives are organised in France (e.g. STI Centre) and in Hong Kong;
- introduction to universities and selective schools: many subsidiaries host students from universities and selective schools in the regions where they operate, particularly for sandwich programmes: on this basis, Ixi maintains partnerships with the Institut polytechnique de Bordeaux, Novancia Business School Paris and École des Gobelins; SEDP with Paris-Est Marne-la-Vallée university and École spéciale des travaux publics (ESTP); Cilia Italia, with the transport engineering university.

The Foundation is extensively present in the field of education, one of the key topics in its action plan. Since 2009, its “Trajets d’avenir” (Paths to the future) programme has awarded grants to students from modest backgrounds, allowing them to access qualifications requiring a long period of study or sectors of excellence. Group mentors also provide collective support. Meetings with Group managers are organised in partnership with Cergy-Pontoise university, Telecom ParisTech and Telecom SudParis, HEC, INSA Centre Val-de-Loire at Bourges, the Paris Institute of Political Studies and the NGO, Sizanani, for Johannesburg university, to create gateways to the labour market. 46 students benefited from this programme in 2016. Almost 15,000 individuals have benefited from the educational projects led by the associations supported by the Foundation.

2.2 PARTNERSHIPS

In Île-de-France, the parent company aims to promote culture and sport via partnerships and events organised in its spaces. These operations aim to make passenger journeys more pleasant and actively contribute to urban culture. According to an audit carried out in 2016, approximately 90% of customers appreciate the events organised, which are perceived as a means of pleasant distraction during journeys.

In 2016, the parent company concluded over a hundred partnerships with key players in the city and leading cultural institutions:

- well over half of these institutions are dedicated to culture, particularly music, literature and poetry, and heritage. Since 2013, RATP has also invested in the field of photography via its “La RATP invite” (RATP presents) programme, introducing passengers to some contemporary photographic creations;
- around fifteen partnerships focus on sport. One of these partnerships, a major deal, notably binds RATP to Paris’ candidature for the organisation of the Olympic Games in 2024. Goal: involve a wide audience and help to ensure the support of Paris inhabitants for this event;
- around 30 involve institutions and particularly focus on sustainable mobility and innovation.

Subsidiaries are also launching partnerships/patronage agreements:

- in the cultural field: in Morocco, in 2016, Casa Tram organised a reading week in the tramway, with the distribution of several thousand books to promote reading. Furthermore, RATP Dev and Casa Tram were also partners in COP22, from 7 to 18 November 2016 in Marrakesh; in Bournemouth, Bournemouth Transport Ltd

continued to host local artists on-board buses, exhibiting their works;

- in the field of sport: many subsidiaries partner local clubs (basketball, rugby, handball, etc.). In 2016, STU Bourges set the example as the official transport operator for the cadet and junior world fencing championships held in the town;
- in the humanitarian and charity fields: British and American subsidiaries are extensively involved in local life. On this basis, Fullington Auto Bus Company simplified the transport of Pink Zone participants, for a gathering of women having survived breast cancer. End-of-year festivities also provide an opportunity to take action, in France, with Christmas buses (Cars Perrier, Sqybus, STDM and Champagne Mobilités) and in the United States with Santa Claus buses. Thanks to this operation, over 3,500 articles were redistributed to the benefit of over 420 needy families (McDonald Transit Associates, in partnership with the Salvation Army).

In cooperation with RATP Dev, the Foundation launches partnerships throughout the business segments of the Group, in the rest of France and internationally:

- in Valenciennes, Adie offered 20 micro-credit grants funded by the Foundation to help the unemployed wishing to create their own businesses;
- the Foundation supported the Seoul subsidiary with its plans, together with the association, Dasarang, to train and employ 30 people with mental disabilities;
- in the Philippines, Morocco and Algeria, three partnerships have been launched to boost businesses created by women, learning for young people and solidarity commitments.

Furthermore, for the second year, the Foundation has renewed the operation allocating time to employees for voluntary work, to the benefit of associations organising solidarity projects in areas where the Group operates. This operation was launched in 2015, for the Foundation’s 20th anniversary.

3 Sub-contracting and suppliers

Matters relating to sub-contracting and suppliers are presented for the parent company as part of this RATP group report. The amount of purchases, excluding energy, is extremely low for RATP Dev, and local contexts vary widely, therefore the contributions of subsidiaries are purely qualitative.

The parent company’s responsible purchasing policy is based on several lines: integrating CSR in purchasing practices, reducing environmental impact, developing socially-responsible purchases, constructing and maintaining balanced relations with suppliers and involving them in this policy. A dedicated team, an internal reference document (purchasing guide, practical sheets, etc.), indicators and buyer training are all implemented.

In 2016, 27% of contracts signed⁽³⁰⁾ included environmental requirements, and 8% included integration clauses. CSR criteria are used to assess proposals for 12% of requests for proposals.

Since 2013, all new buyers have been required to undertake training in “responsible purchasing”. The aim of these training sessions is to ensure that the new buyers are aware of CSR priorities, acquire skills and share good practices. 21 new buyers joined the Group in 2016 and will receive this training in 2017.

(30) Data taken from performance records for contracts with a value in excess of €100 000, excluding local exceptions.

Training

	2016	2015	2014
Number of buyers trained (since 2012)	154	143	133
Percentage of existing buyers trained in 2016	75	84	83

The involvement of the purchasing service has also led to membership and active participation in the working groups of the Observatoire des achats responsables (ObsAr – Observatory for responsible purchases), Pacte PME (SME support group) and Handeco.

3.1 INTEGRATING SOCIAL PRIORITIES IN THE PURCHASING POLICY

At parent company level, close attention is paid to working conditions on the premises of suppliers and illegal labour (cf. General Instruction IG 530 on illegal labour and social audits).

Via its purchases, it contributes to the implementation of public employment policies. The promotion scheme for socially-responsible purchases was published in 2016, and defines targets and resources to promote the employment of the most vulnerable groups. This scheme focuses on disabilities and integration via work.

After having developed social clauses on various purchasing segments, since 2015, RATP purchasing service has applied a qualitative approach aiming to improve the efficiency of the process: internal policy, dedicated team, close relations with local players, involvement of facilitators, monitoring of execution procedures.

Socially-responsible purchases*

	2016	2015	2014
Number of hours of integration completed (clauses and purchases from SIAE)	359,000	291,000	290,000
Number of beneficiaries of integration programmes	643	515	536
Number of (current) contracts with an integration clause	163	131	90
Purchases from the supported and protected sector (amount invoiced excluding VAT)	€712 k	€746 k	€472 k

* These indicators incorporate data from SEDP, the real estate management representative.

Furthermore, RATP participated in the working groups created by the State as part of the *Charte d'engagement RSE pour les marchés du Nouveau Grand Paris* (Charter of CSR commitment for contracts in the New Grand Paris) on integration via economic activity and SME access.

Around the world, the incorporation of social priorities in purchasing processes is generally covered by the legislation in force. In this respect, subsidiaries in London refer to the *Ethical trading initiative base code*. In Italy, suppliers must produce a specific document proving their compliance with legal social obligations from the request for proposals phase. In South Africa, sub-contractors and suppliers are inspected to check compliance with legal obligations and commitments in terms of sustainable purchases.

In 2016, over 359,000 hours of integration were organised via the purchases of the parent company, to the benefit of 643 individuals. RATP uses two sources of leverage for this purpose:

- integration clauses are included in suitable contracts – works and services in particular. The plans to extend metro lines offer an opening for many hours of integration: 200,000 hours are planned for north lines 11 and 14, and 90,000 for line 4. These projects represent an opportunity to launch ambitious and effective policies (long missions, training, socio-professional support). The “tunnel boring assistance” training course, intended for individuals benefiting from integration programmes, is specifically designed to meet the needs of civil engineering firms for lines 4 and 14, and illustrates this point. This approach will also be deployed for line 11;
- direct purchases from integration structures via economic activity (SIAE) also offer a second line of development. The new purchasing procedure used to reserve a batch from SIAE was tested in 2016, in view of allocating a cleaning contract for a camp.

In 2016, RATP took things further, by creating an integration project with a support activity: caring for the green areas around tramway T2. Thanks to this initiative, 10 introductory positions were created, and close relations established between project employees and RATP teams.

Purchases worth €712 thousand were concluded from the supported and protected sector in 2016. The reduction in turnover compared with 2015 is attributable to a reduced level of activity for one of the contracts, and does not reflect the extensive commitment of buyers to the disabled sector. In fact, the volume of services entrusted to Esat and EA increased in 2016: laundry services for maintenance uniforms, collecting and treating waste, and manufacturing parts for rail rolling stock.

3.2 SUB-CONTRACTING AND CONSIDERING THE CSR POLICIES OF SUPPLIERS

The following results apply for the 5,269 suppliers of the parent company, for 2016:

Suppliers

	2016	2015	2014
Number of (direct) parent company suppliers	5,269	4,899	4,724
Proportion of suppliers established in France (in percentage)	96	97	95.8
Proportion of SMEs among direct suppliers (in percentage)	66	67	64
Purchasing turnover invoiced to SMEs (in millions of euros)	524	453	361
Ratio of purchasing turnover invoiced to SMEs/total purchasing turnover invoiced (30% excluding energy and rolling stock) (in percentage)	20	17	16.6

The parent company applies an active policy to support the fabric and innovation of SME. This policy simplifies access to contracts for SME thanks to several sources of leverage: use of batches, electronic procedures, acceptance of variants, co-contracting/sub-contracting encouraged. RATP also implemented the reduction in the maximum financial capacity of candidates as early as 2014.

For the fifth year running, Pacte PME has organised a survey targeting SMEs, on behalf of the parent company, to characterise customer-supplier relations and identify means of improvements. The presentation of the results of this survey, in the presence of 90 representatives of SMEs, offered a special moment for discussion with buyers.

4 Loyal practices

4.1 PREVENTING CORRUPTION AND PROMOTING HUMAN RIGHTS

RATP has included the risks related to corruption and non-compliance with human rights on its list of across-the-board risks under surveillance, which must be managed by the risk manager and covered by the internal auditing system (see CEO's report). In addition, the conformity service started reporting to the general delegation for risk management towards the end of 2016, in view of the implementation of the Sapin II act.

Group commitments in terms of passenger satisfaction, public transport authorities, compliance with government contracts, loyal practices towards competitors, quality relations with suppliers and the fight against corruption all appear in the *RATP Group Code of ethics*, as part of corporate ethics. Since 2014, all parent company managers have received training in this code via e-learning.

Specific provisions apply as part of the purchasing policy and supplier relations. A code of conduct applies to relations with suppliers (General instruction 499b). The Charter of CSR commitments for contracts in the New Grand Paris signed by the parent company, as well as the *Charte des achats responsables, applicables à Telcité et à ses fournisseurs* (Charter for responsible purchases, applicable to Telcité and its suppliers), adopted in 2015, also reflect this commitment.

Social audits are carried out on production sites for textile contracts. The awarding of contracts depends on the results of these audits, which are entrusted to an independent agency, and corrective actions can be requested of suppliers. In 2016, two audits were carried out and no production site was rejected.

Audits

	2016	2015	2014
Number of social audits carried out during the year (textiles)	2	10	7
Total number of audits since 2000	74	72	62
Total number of sites audited and rejected since 2000	6	6	5

4.2 PASSENGER SAFETY

Rail safety is an absolute priority for the RATP group. Rail safety requires an overall view, as it affects all trades: engineering, maintenance and operations. Rail safety is based on an understanding of technical reference documents and procedures and personnel skills.

Managing this risk is a constant priority, throughout the life cycle of equipment: from the design phase, with the integration of safety requirements in specifications, preparing safety documents and when carrying out pre-commissioning tests; during the life cycle, with maintenance based on reference documents, the tracking of incidents, feedback and inspections.

Since 2012, a general delegation for rail safety (DGSF) has reported directly to the CEO. In the context of an annual audit programme for rail safety validated by the Group's Executive Board, this delegation takes action at both parent company and subsidiary level. In 2016, works in Île-de-France benefited from feedback on the rail-based safety of the metro, RER and tramway systems, and execution conditions for rail tests for the metro, RER, tramway and Orlyval networks. The delegation also carried out an audit on tramway maintenance and operation in Valenciennes.



In parallel, the parent company continued to revise its fire safety and rail safety management and policy for the Paris rail network in order to integrate changes to internal structures, the external environment and fire safety.

The Group's recognised expertise in terms of rail safety has been harvested by French and European bodies: DGSF thereby continued to contribute to the rewrite of decree 2003-425 on the safety of guided public transports, by sharing Group feedback with State services; it also participated in the works of European bodies, in the context of European mandate M/486, aiming to adapt and create electro-technical standards for urban rail structures (metro, tramway).

RATP expertise in rail safety was recognised at the 26th International railway safety council (IRSC), in October 2016 in Paris, where the company was awarded the innovation and safety award for its action

“Anticiper des précurseurs de danger par le développement d’une fonction prédictive” (Developing a predictive service in view of planning ahead for early signs of hazards). For the last fifteen years, RATP has developed an innovative method based on an algorithm, aiming to identify and manage the appearance and development of early signs of hazards, in view of launching the necessary preventive or corrective actions, and optimising rail safety.

Finally, in 2016, the parent company launched a large-scale behavioural communications campaign to ensure that passengers are aware of the risks of serious accidents (falling on the tracks, between a train and a platform, person hit or dragged along by a train) caused by dangerous behaviour in transport spaces. RATP has selected an offbeat tone for its prevention message, targeting neither anxiety or morality, thanks to an approach combining billboards, operations in the field with employees and operators, and communication on social networks.

Note on extra-financial reporting methodology

Period 2016

General framework

As per decree no. 2012-557 published on 24 April 2012 on obligations in terms of social and environmental transparency for companies pursuant to the Grenelle II act, all listed companies must publish social, environmental and societal information from the 2012 period. This obligation also applies for companies whose consolidated workforce or turnover exceeds a set threshold from the 2012 period or later, depending on the threshold in question.

RATP group is not formally affected by this obligation. However, RATP group decided to plan ahead and adopt the same rules as those applicable to private firms by ensuring that the Statutory Auditor (referred to as the independent third party for this purpose) checks its social, environmental and societal information.

The scope of reports

For its fourth reporting period, RATP group decided to extend the consolidation scope of the parent company and 25 RATP Dev subsidiaries operating in France, Europe and internationally. This scope is expected to progressively expand in the coming years.

The precise scope of available data is specified for each indicator in the reports themselves. This scope is identical for all types of information with the exception of:

SOCIAL INFORMATION

- The subsidiary SEDP (real estate management and asset development) is excluded from social indicators.
- “Pay and promotions”: the concept of mean pay for existing members of personnel (RMPP) can only be applied for the parent company.

ENVIRONMENTAL INFORMATION

- “Number of people exposed to the maximum threshold”: this information in relation to a European directive on noise (EU directive 2002/49/EC) only affects the scope of the parent company.
- “Quality and environmental training sessions” and “Ground use”: this information is not available at subsidiary level.
- “Water consumption and water supply based on local restrictions”: this information is not available in Morocco and South Africa.

SOCIETAL INFORMATION

Two items of information on purchasing: “Integration of social priorities and the extent of sub-contracting” and “Integration of CSR in supplier relations” are entered, in quantitative terms, only for the parent company due to the low volume of purchases concluded by RATP Dev.

The schedule for reports

The schedule for CSR reports is similar to the schedule for financial reports in order to incorporate extra-financial (CSR) reports into the company’s financial report, and covers the past period of 2016. Social, environmental and societal information is reported over the entire calendar year, *i.e.* the period from 1 January 2016 to 31 December 2016 (twelve months).

Internal audits and structure

Three reporting protocols govern the collection of data and specify internal responsibilities.

DATA COLLECTION

Quantitative Group data is collected at two levels:

1. **at parent company level:** the Human Resources division and the Sustainable Development unit of the Strategy and Innovation division are responsible for producing and checking raw data transferred from the parent company to a network of internal correspondents;
2. **at RATP Dev level:** the subsidiary produces and checks the raw data provided by subsidiaries, with the exception of data on greenhouse gas (GHG) emissions. GHG data is collected by RATP Dev, but produced and checked by the Sustainable Development unit, using specific methods and applications.

CONSOLIDATION

The Financial division ultimately consolidates Group figures. Qualitative information is transferred in the form of an interview or a questionnaire.

Each division, unit and subsidiary in charge of data is responsible for the information produced and must be able to provide justification. Final checks are carried out during the consolidation process. The independent third party may access the map of the information systems.

Reporting applications

At parent company level: data is collected using existing information systems and applications.

Social data is combined and/or converted by the Human Resources division using dedicated HR information systems (Rhapsodie, Acciline).

Environmental information on the consumption of energy, water and GHG emissions is combined and/or converted by the unit using existing applications (Base Carbone® by Ademe for GHG). Data on noise is processed using data collection and/or simulation software.

At RATP Dev level: the subsidiary uses an IT application, Hyperion, which automatically collects and processes data provided by subsidiaries, with the exception of data on GHG emissions.

Particularities and methodological limits

Social, environmental and societal data can be subject to methodological limits for several reasons: the lack of harmonised definitions and national and international legislation, the qualitative nature of some items of data, or the different interpretations of standards between the parent company and RATP Dev subsidiaries.

SOCIAL ASPECTS

The Financial and Human Resources divisions decided that the quantitative social data provided for reporting purposes corresponded to raw data from the various information systems on 31 December 2016. Minor margins for imprecision exist, however, thanks to the tests carried out, these margins can be considered as insignificant.

All departures at the end of a trial period, whether decided by the employee or the employer, are recorded under "Other" ("Recruitments and departures" indicator). Authorised periods of absence are not incorporated in absenteeism figures for the parent company.

ENVIRONMENTAL ASPECTS

Environmental data calculated on the basis of metre readings or invoices excludes data which was not available on the date of issue of the management report. Missing data is not estimated in the data provided.

With respect to the "Water consumption" indicator: consumption on the part of the parent company is obtained on the basis of the invoices received on the date of issue of the management report. On this basis, consumption may be under-estimated if invoices are received late from some suppliers.

Five environmental indicators ("Production of non-hazardous waste"; "Total energy consumption"; "Greenhouse gas emissions from powertrains"; "Certified industrial sites" and "Industrial sites with an EMS") were corrected *ex post*:

- "Production of non-hazardous waste": volumes of non-hazardous waste (ferrous and non-ferrous) from the reworking of rolling stock were re-allocated to the periods in question, retroactively, following the receipt of the associated buyback slips;
- "Total energy consumption" and "Greenhouse gas emissions from powertrains": indicators for energy consumption and greenhouse gas emissions are established for the scope with regards to the parent company and RATP Dev subsidiaries. This scope includes all energy consumption, *i.e.* powertrain energy consumption induced by transport services, building energy consumption and fuel consumption by auxiliary vehicles (service vehicles, company vehicles);
- "Industrial sites certified ISO 14001" and "Industrial sites with an EMS"

The "People exposed to the maximum threshold of EU directive 2002/49/EC" indicator is calculated regardless of the index applied. In fact, the maximum thresholds defined in the directive are actually: exceeding the Lden index (24 h day) by 73 dB(A) and the Ln index (night) by 65 dB(A) for rail transport. Thus, the indicator proposed reflects the total number of people exposed to the maximum threshold in the directive for the Lden and Ln indexes, regardless of the transport mode.

Furthermore, this section was modified pursuant to act 2015-992 dated 17 August 2015, on the energy transition for green growth, and in particular: adding circular economy as a topic, including prevention, waste management and sustainable resource use, as well as the new topic of food waste. No figures are, as yet, available for food waste. The main sources of greenhouse gases were also specified, in accordance with decree no. 2016-1138 dated 19 August 2016 on environmental information in the management report.

SOCIETAL ASPECTS

In order to better report on the impact of its activities on the economy, in 2016, RATP adopted a new calculation method for the indicator relating to the number of indirect jobs created and/or maintained in France thanks to purchases made by the parent company. This indicator is measured based on turnover invoiced by the parent company and analysis of input-output corresponding to the economic model developed by W. Leontief (winner of the Nobel prize in economics in 1973).

Report by one of the Statutory Auditors

This is a free English translation of the designated independent third party's report issued in French and it is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

Report by one of the Statutory Auditors, appointed as independent third party, on the consolidated human resources, environmental and social information included in the management report

Year ended 31 December 2016

Ladies, gentlemen

In our capacity as Statutory Auditor appointed as an independent third party to RATP (hereafter "RATP"), and certified by Cofrac under no. 3-1049⁽¹⁾, we hereby report to you on the consolidated human resources, environmental and social information for the year ended 31 December 2016, included in the management report (hereinafter named "CSR Information"), pursuant to article L. 225-102-1 of the French Commercial Code.

Responsibility of Epic

The Board of Directors is responsible for preparing the company's management report which, as part of the voluntary approach adopted, includes the CSR Information required by article R. 225-105-1 of the French Commercial Code in accordance with the protocols used by RATP (hereinafter the "Guidelines"), as summarised in the management report and available on request from the company's Communications department.

Independence and quality control

Our independence is defined by regulatory texts, the French Code of ethics for our profession and the requirements of article L. 822-11-3 of the French Commercial Code. In addition, we have implemented a system of quality control which includes documented policies and procedures on compliance with the ethical requirements as well as the applicable legal and regulatory requirements.

Responsibility of the independent third party

On the basis of our work, our responsibility is to:

- attest that the required CSR Information is included in the management report or, in the event of non-disclosure of a part or all of the CSR Information, that an explanation is provided in accordance with the paragraph three of article R. 225-105 of the French Commercial Code (attestation regarding the completeness of CSR Information);
- express a limited assurance conclusion that the CSR Information taken as a whole is, in all material respects, fairly presented in accordance with the Guidelines (conclusion on the fairness of CSR Information).

Our work involved four persons and was conducted between November 2016 and March 2017 during a six-week working period. We were assisted in our work by our CSR experts.

We have performed our work in accordance with the order dated 13 May 2013 defining the conditions under which the independent third party performs its engagement, and with the professional standards of the Compagnie nationale des commissaires aux comptes relating to this work and, with regard to the conclusion of fairness, in accordance with International Standard ISAE 3000⁽²⁾.

(1) Whose scope is available at www.cofrac.fr.

(2) ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.

1. Attestation regarding the completeness of CSR Information

Nature and scope of our work

On the basis of interviews with the individuals in charge of the relevant departments, we obtained an understanding of the company's sustainability strategy regarding human resources and environmental impacts of RATP's activities and its social commitments and, where applicable, any actions or programs arising therefrom.

We compared the CSR Information presented in the management report with the list provided in article R. 225-105-1 of the French Commercial Code.

For any consolidated information that is not disclosed, we verified that explanations were provided in accordance with article R. 225-105, paragraph 3 of the French Commercial Code.

We verified that the CSR Information covers the scope of consolidation, *i.e.* the RATP, its subsidiaries as defined by article L. 233-1 and the controlled entities as defined by article L. 233-3 of the French Commercial Code within the limitations set out in the methodological note, as presented in the management report.

Conclusion

Based on the work performed and given the limitations mentioned above, we attest that the required CSR Information has been disclosed in the management report.

2. Conclusion on the fairness of CSR Information

Nature and scope of our work

We conducted around 30 interviews with the persons responsible for preparing the CSR Information in the departments in charge of collecting the information and, where appropriate, those responsible for internal control and risk management procedures, in order to:

- assess whether the Guidelines are appropriate in terms of their relevance, completeness, reliability, neutrality and understandability, and taking into account industry best practices where appropriate;
- verify the implementation of data collection, compilation, processing and control process to reach completeness and consistency of the CSR Information and obtain an understanding of the internal control and risk management procedures used to prepare the CSR Information.

We determined the nature and scope of our tests and procedures based on the nature and importance of the CSR Information with respect to the RATP's characteristics, the human resources and environmental challenges of its activities, its sustainability strategy and industry best practice.



Regarding the CSR Information that we considered to be the most important, listed in appendix 1:

- at parent entity level, we referred to documentary sources and conducted interviews to corroborate the qualitative information (organisation, policies, actions), performed analytical procedures on the quantitative information and verified the calculations and data consolidation using sampling techniques. We also verified that the information was consistent and in keeping with the other information in the management report;
- at the level of the representative sample of entities selected⁽³⁾ by us on the basis of their activity, their contribution to the consolidated indicators, their location and a risk analysis, we conducted interviews to verify that procedures are properly applied and to identify potential undisclosed data, and we performed detailed tests using sampling techniques, in order to verify the calculations and reconcile the data with the supporting documents. The selected sample represents 81% of headcount considered particularly representative of the workforce information section, and between 84% and 99% of the environmental data considered to be largely representative of the environmental section (see the list of environmental indicators listed in appendix 1).

For the remaining consolidated CSR Information, we assessed its consistency based on our understanding of the Epic.

We also assessed the relevance of explanations provided for any information that was not disclosed, either in whole or in part.

We believe that the sampling methods and sample sizes we have used, based on our professional judgment, are sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures. Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the CSR Information cannot be totally eliminated.

Conclusion

Based on the work performed, no material misstatement has come to our attention that causes us to believe that the CSR Information, taken as a whole, is not presented fairly in accordance with the Guidelines.

Paris-la Défense, 28 March 2017
KPMG SA

Philippe Arnaud
Partner

APPENDIX 1

Human resources indicators

- Total Group headcount and breakdown by gender, age and geographical area
- Proportion of women among senior executives
- Group's total gross payroll and parent company's average net monthly compensation per employee
- Joiners and leavers, including breakdown of the number of leavers by reason of leave
- Proportion of part-time employees
- Absenteeism
- Number of collective agreements signed during the year
- Work-related accidents: frequency rate and severity rate
- Number of training hours
- Total number of people with disabilities, number of people with disabilities hired

Environmental indicators

- Number of certified industrial sites, number of industrial sites with an EMS
- Total quantity of non-hazardous waste and hazardous waste
- Persons exposed to noise levels above the maximum limit specified by EU directive 2002/49/EC
- Total water consumption supplied through a public network
- Total energy consumption and breakdown of energy consumption by use
- Greenhouse gas emissions (from buildings and from transport services)

Qualitative information

Workforce information

- Organisation of dialogue between management and employees
- Occupational health and safety conditions

Environmental information

- Company's general environmental policy and environmental practices
- Employee training and information on environmental protection
- Resources devoted to preventing environmental risks and pollution
- Measures to prevent, mitigate or remedy environmentally-harmful air, water and ground emissions

Social information

- Conditions for dialogue with persons or organisations
- Importance of sub-contracting and making CSR a consideration in supplier and sub-contractor relations
- Passenger health and safety measures

(3) RATP, Transports de Voyageurs du Mantois, France (TVM), Compagnie des Transports du Boulonnais, France (CTB), Compagnie des Transports du Valenciennois et du Hainaut, France (CTVH), Bournemouth Transport Ltd, United Kingdom (Bournemouth).

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Introduction

The purpose of this document is to report on the preparation and organisation of the work of the Board of Directors and on the internal control procedures implemented by RATP, in accordance with the provisions of article L. 225-37 of the French Commercial Code.

Internal control or business control means “control of business activities”. Internal control must be viewed as a procedure implemented by the company for all employees, with the aim of ensuring:

- compliance with current laws and regulations;
- implementation of the instructions and guidelines issued by executive management;
- the smooth running of the company’s internal processes, particularly those used to safeguard assets;
- the reliability of financial information.

The structure of this report is based on the reference framework for internal control reporting set out by the French Financial Markets Regulator (AMF) and published in January 2007 to assist French companies that are required to prepare this type of report.

As stated in AMF’s reference framework, “by contributing to the prevention and management of risks that can hinder the company in achieving its objectives, the internal control system plays a key role in the manner in which the company’s business activities are conducted and managed. However, internal control cannot provide absolute assurance that the company’s objectives will be met.”

As the Board of Directors is the governance body that ensures that the internal control system is appropriate for the company, the first part of this report describes the way the system works and the significant work performed during 2016. The second part provides an overview of the organisation of the risk management and internal control and audit system, and the third part explains how control and monitoring activities contribute to ensuring reliable accounting and financial reporting.

This report was presented to the Strategic Committee at its meeting on 16 March 2017. Pursuant to legislation effective as of 2008, it was approved by decision of the company’s Board of Directors at their meeting⁽¹⁾ on 24 March 2016.

1 The Board of Directors

1.1 ORGANISATION PRINCIPLES AND ROLE

In terms of corporate governance, RATP complies with the rules set forth by the French State Equity Investment Agency, which it also oversees.

RATP’s Board of Directors comprises 27 members pursuant to Government decree No. 84-276 of 13 April, 1984 (details are provided in appendix 1). The Board has adopted rules of procedure in

accordance with article 6-12 of French decree No. 59-1091 of 23 September, 1959 on the legal form of RATP. These rules may be updated on the basis of the Board’s Governance.

The Board of Directors is chaired by Ms Élisabeth Borne, who was appointed President and Chief Executive Officer of RATP by the decree of 21 May 2015 for the period 2014-2019.

The Board of Directors is responsible for all the company’s strategic decision-making on key economic, financial and technological issues. These include matters relating to the company’s state and regional contractual plans, business plan and the contractual agreement with the Syndicat des transports d’Île-de-France (STIF – Île-de-France transport authority). Decisions are taken on the basis of input from three standing committees, one of which deals with matters concerning the technical and technological modernisation of transport, the second, economic and strategic issues and the third, innovation and customer service.

The role of the audit committee, comprising six Board members, is to advise the Board on the financial statements, particularly with regard to the reliability of the information systems used to prepare them, financial management, accounting and management principles, risk management policy and financial reporting.

The Board approves contracts exceeding €60 million, upon the advice of the Technical and Technological Transport Modernisation Committee, which has a right of evocation for contracts worth between €5 million and €60 million.

The Board empowers the President and Chief Executive Officer to purchase, extend or dispose of equity investments of a nominal value below €2 million, and to reclassify securities between RATP and its majority-owned subsidiaries.

The Board has set the threshold below which the President and Chief Executive Officer is authorised to purchase or dispose of all real property at €2 million, in accordance with article 8-d of the decree of 23 September, 1959 on the legal status of RATP.

Directors that represent the State or employees are unpaid. However, the expense that they incur in the performance of their duties is reimbursed by RATP. For qualified persons, if the Board decides to pay directors’ fees in addition to reimbursing their travel expenses, such fees are subject to the approval of the Transport Minister and the Minister for the Economy and Finance.

The Board, subject to ministerial approval pursuant to article 7 of decree No. 59-1091 of 23 September, 1959, sets the directors’ fees for qualified persons. These are paid to directors present at Board meetings and at meetings of the Board’s two standing committees. They are set at €148 per Board meeting and €74 per committee, commission or working group meeting, as of 1 January, 2007.

(1) French law 2008-649 of 3 July, 2008 introducing provisions and amendments in French corporate law from EU law, articles 26 and 29 (*Journal officiel* of 4 July, 2008).

1.2 SIGNIFICANT WORK BY THE BOARD IN 2016

1.2.1 APPOINTMENTS AND DEPARTURES OF DIRECTORS

In March, Ms Mahieux left her position as CEO of Crédit Municipal de Paris to join the Inspector General of Finance and resigned from her position as director. She was replaced by Ms Sylvie François in July, who was appointed director by the decree of 12 July, as a qualified person with a professional background in business.

In July, Mr Xavier Girre, now executive manager responsible for EDF's Finance Department resigned, since he no longer had the time required to perform his director's duties, in particular the Presidency of the Audit Committee. In October, he was replaced by Mr Bruno Angles, manager of Crédit Suisse, as director, appointed by the decree of 26 September, as a qualified person selected for their expertise in transport.

In December, Ms Bellon was appointed by the Board as a member of the Audit committee, then appointed by her peers as President of said committee.

1.2.2 DEVELOPMENT AND NETWORK MODERNISATION POLICY

The different aspects of the development and network modernization policy were discussed on several occasions:

Infrastructure

During its meeting in January, the Board approved the launch of a study on the supply and installation of platform facings for the line 4 automation project and potentially other lines on the Paris metro.

The infrastructure surveillance and maintenance policy was discussed again in May.

Also in May, a contract relating to the extension of line 11 was approved. This concerns the contract relating to the structural work on the circular tunnel and ancillary work as well as the contract for the structural work on the Rosny loop-tunnel, the Rosny – Bois-Perrier station, rectifier station and ancillary work.

A report on the line A RVB project (work to update the tracks and ballast completed in the summer of 2016) was prepared in August.

Operating activities

In October, information was provided on the report on RER line B by the integrated command center (CCU)/single line department (DLU).

Land use

In March, the project for the purchase, off-plan, of a volume of ZAC (joint development zone) Clichy – Batignolles was adopted, to create a secondary access to the Porte de Clichy station as part of the extension to the north of line 14.

The Real Property and Land Capital Expenditure Master Plan was discussed in August.

In November, the project for the restructuring of the Vaugirard workshops and the disposal by the Île-de-France transport authority of the old headquarters located in rue de Villars, Paris 7th *arrondissement*, were adopted.

Capital expenditure master plans and preliminary projects

The capital expenditure master plans were the subject of many discussions.

In May, the contribution of railway rolling stock to the capital expenditure master plan was presented. In July, discussions were held on the "transport system" and "IT systems" capital expenditure master plans. In October, discussions were held on the passenger spaces and services, infrastructure and Bus rolling stock capital expenditure master plans. An overview of the master plans was also presented.

Preliminary projects were also discussed and adopted. During the meeting in March, the desaturation, accessibility and renovation of the La Croix de Berny station was discussed, as part of the RER B master plan.

In November, discussions concerned RER line B and the updating of the signalling, improved management of disruptions and the creation of parking tracks at Saint-Rémy-lès-Chevreuse; for line A, the renovation of the Auber and Nanterre – Ville stations, and, for line 14, the extension to the south of the line between Olympiades and Orly, and systems for the entire line.

1.2.3 INDUSTRIAL AND ENGINEERING POLICY AND GREATER PARIS

In July, the President stressed that the linking up of the Greater Paris Express and the existing networks presented a major challenge to the effectiveness of the Île-de-France transport systems.

1.2.4 SOCIAL AND WORKFORCE ENVIRONMENT

The 2016 training plan was adopted in January and the HR policy was presented during the same meeting.

In May, the use of RATP land for the building of housing was discussed.

The 2015 financial statements of the CCAS (local social welfare center) were also approved in May and its forward budget was approved in November.

Alongside these actions, RATP continued its social housing policy in 2016 through its subsidiary Logis-Transports.

In November, the 2025 Challenge initiative for employees was presented to the Board members.

RATP's social housing policy was presented at the same meeting.

During the meeting in October, the Foundation's program for the next five years was presented.

1.2.5 CONTROL OVER THE COMPANY'S FINANCIAL INFORMATION AND COMPETITIVENESS

The Board approved the consolidated and parent company financial statements at its meeting on 25 March 2016, as well as the position as at 31 December 2015 of current assets and current liabilities.

In March, it adopted a bus rolling stock (MRB) framework agreement enabling the pooling of fuel services for buses and coaches of RATP group (RATP and subsidiaries), which aims to reduce the overall cost of the diesel supply. Again in March, the directors were provided with information on the balance sheet for the company's procurement business in 2015.

In May, the decision was made to increase the EMTN ceiling in relation to the framework contract defining the conditions under which RATP can issue bonds. This operation allows the company to borrow in euros and other currencies at any time on the financial markets.

In November, the RATP budgets and capital expenditure programs and the planned contribution to social welfare were approved.

1.2.6 THE GROUP'S DEVELOPMENT POLICY

The Board's Economic Strategy Committee oversees the development of subsidiary activities. Specifically, it conducts regular in-depth reviews of the annual and half-yearly financial statements, the budget, the medium-term business plan and the quarterly reports of RATP Dev, the most significant subsidiary in terms of revenue.

Throughout the year, the President kept directors informed of progress in RATP's development and of business wins by RATP Dev in France and internationally, as well as the general outlook for the subsidiaries.

The budget and consolidated financial statements of RATP group were also presented to the Board.

1.2.7 SUSTAINABLE DEVELOPMENT AND NEW MOBILITIES

The Group's annual and sustainable development report at 31 December 2015 was approved during the meeting of March 2016.

During the meeting on 1 July, and with the aim of proposing innovative offerings, the President informed the Board of the presentation of two self-driving shuttle buses that the company wishes to acquire to research how these vehicles could be included in the fleet.

During the same Board meeting, in relation to the Viva Technology exhibition, the President stressed the major challenge presented by the digital transformation and announced the launch of the new version of the RATP app, which can locate all transport options close to the user (RATP services, Vélib and Autolib') and can link with their calendar to perform itinerary searches.

The first Bluebus electric bus (line 341) was launched in the same month.

In addition, the Bus 2025 plan was presented in July.

In October, the President informed the Board that the first demonstration of the self-driving shuttle bus would take place on 24 September, in conjunction with its partner and supplier Easymile.

In November, discussions were held on RATP group's strategy for new mobility.

1.2.8 SERVICES, CUSTOMER RELATIONS

Discussions were held on subjects such as the campaign for the prevention of risky behavior, the impact of the Savary law, the campaign against fraud and, in November, on an innovative "Appel à idées RATP" (RATP call for ideas) initiative consisting of a major consultation of passengers regarding their expectations.

In November, the contract for the RATP ticketing system was approved.

The passenger perception survey conducted by the Île-de-France transport authority was also presented.

In May, information was provided on RATP's open data policy, which is a response to the provisions of the Macron law requiring transport operators to make its data available to its customers in real time. The RATP's strategy in this area was presented in July.

1.2.9 RISK MANAGEMENT AND RAILWAY SAFETY

The Board discussed Group risk management in July. It described the process which involves setting out guidelines, risk mapping and the implementation of risk management handling and action plans.

The report on railway security was presented to the Board in May. Each of the networks was analysed.

1.2.10 BOARD GOVERNANCE EVALUATION MISSION

A report on the Board Governance evaluation mission was discussed during the Board meeting in January.

1.2.11 INSTITUTIONAL RELATIONS

The President regularly reported to the directors on her meetings with the company's institutional partners and regional (Île-de-France) and national representatives, and on initiatives and processes undertaken to protect the company's interests.

The contract between the Île-de-France transport authority and RATP was the subject of many discussions and decisions throughout the year. Thus, amendments to the contract were presented.

In July, information on the financing of the new flat-rate Navigo Pass travel card was presented to directors.

At the October Board meeting, the President discussed the widespread consultation of Île-de-France residents by means of public meetings, launched by the Île-de-France transport authority, in relation to the project for the overhaul of bus services in Paris and Île-de-France. RATP conducted "service engineering" studies which checked the relevance of the itineraries proposed, analysed the impacts in terms of connections, passenger volumes, the proposal for a surface network service, and assessed the evaluation of the methods to be used to implement these developments.

In addition, the mediator presented its annual report in May.

The President organised a Board of Directors' seminar in June on the sharing of strategic thinking for the Group.

Several themes were dealt with, including the development of subsidiaries, the challenges of opening up to competition, and the economic and financial or even human and social challenges. Major areas of innovation for the Group, improvement of the passenger experience by modernising spaces, passenger information and operating modes were also discussed. This seminar also raised issues relating to digital transformation and energy transition.

2 Risk management and internal control and audit functions

Internal control is an integral part of risk management, itself an integral part of the overall corporate governance process.

Risk management and internal control play complementary roles in controlling the company's activities⁽¹⁾:

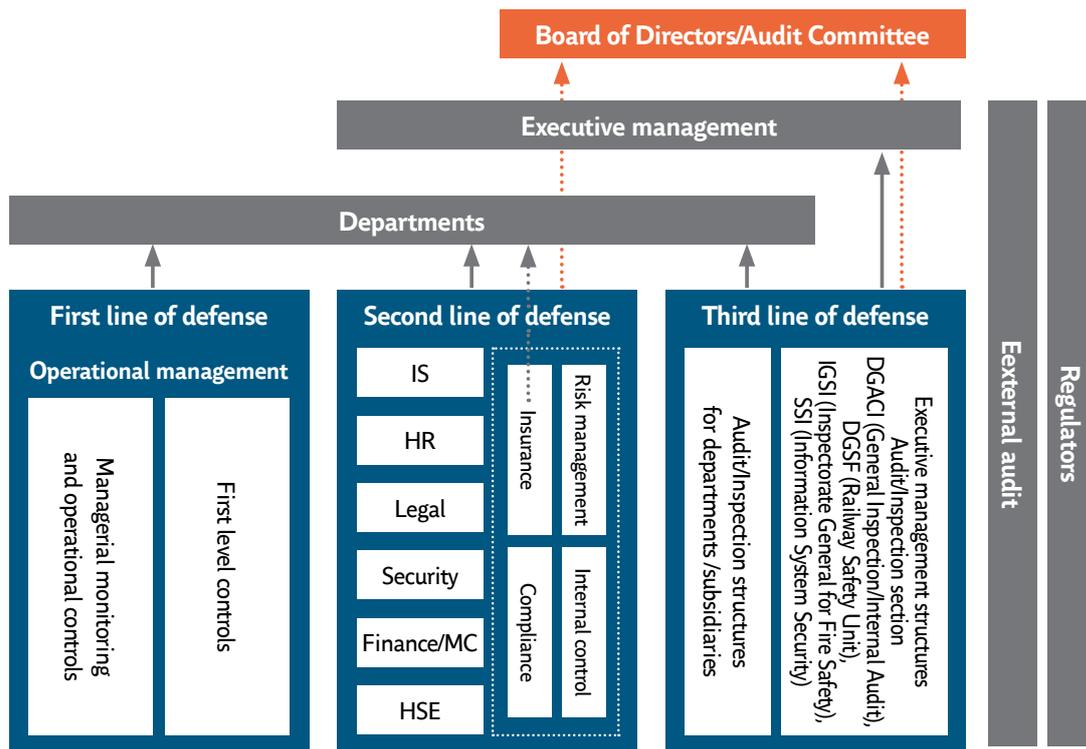
- “firstly, the risk management system aims to identify and analyse the company's main risks; risks that exceed acceptable levels set by the company are dealt with and, as the case may be, subject to action plans; these plans may call for the implementation of controls, a transfer of the financial consequences (through

insurance or an equivalent mechanism) or an adaptation of the organisational structure; the controls to be implemented are part of the internal control system; in this way the internal control system contributes to the management of the risks incurred in the company's activities;

- secondly, the internal control system relies on the risk management system to identify the main risks that need to be controlled;
- in addition, the risk management system needs to include its own controls that are part of the internal control system and aimed at ensuring the proper functioning of the risk management system.”

Moreover, the risk management and internal control systems are continuously monitored to assess the quality of their performance. Oversight is implemented by the internal audit function, one of the roles of which is “to evaluate the effectiveness and contribute to the improvement of risk management processes”, as set forth in IIA⁽²⁾ Standard 2120.

With this in mind, RATP group's approach is based on the principle of three lines of defense as defined by COSO 2013 and clarified by the French audit and internal control institute (institut français de l'audit et du contrôle interne - Ifaci) and the French Association for Corporate Risk Management and Insurance (Amrae):



- the first line is represented by operational management, which ensures the rapid achievement of results and the control of the work processes by monitoring day to day activities; it thus constitutes a first line of defense against failure to achieve goals;

- the second line is represented by cross-company functions, which continuously monitor operating activities, as well as the risk management and internal control functions;
- the third line of defense is borne by the internal audit function at the department and executive management level.

(2) AMF reference framework, revised in July 2010.

(3) Institute of Internal Auditors.

2.1 RISK IDENTIFICATION AND MANAGEMENT

RATP group distinguishes two specific categories of risk:

- corporate risks, which are company-wide risks;
- and risks within the departments and subsidiaries, identified for Group subsidiaries and departments.

The Executive Committee defines the company's risk control policy. A company-wide risk owner is appointed by a member of the Executive Committee, at the proposal of the head of risk management.

This "risk owner" is required to control the risk, *i.e.* ensure monitoring and analysis, and also supervise the actions to be implemented to avoid them.

In addition, each head of department is responsible, with regard to the Executive Committee, for controlling the risks to which its business is exposed.

2.1.1 ROLE OF THE HEAD OF RISK MANAGEMENT

The role of the **head of risk management**, who operates at RATP group level and reports to the staff director, is to oversee comprehensive corporate risk management systems to ensure that all Group risk is monitored.

A general instruction defines the risk management system and the company policies to be implemented by all managers. These methods are based on three processes:

- defining formal procedures for the risk framework, risk assessment and mapping of priority risks; risks are broken down according to their type (strategic/commercial, operational, human resources, financial/economic, regulatory);
- the development of plans to deal with situations identified as major threats on the map, in order to define the effectiveness of existing prevention and protection barriers, whatever the technical, organisational, legal, commercial, communication type, etc.; the output data for this process is the acceptability or otherwise of the risk as is, and if not, the introduction of an action plan aimed at enhancing risk control;
- the monitoring of ongoing actions as defined at the end of risk management plans.

This method is applied at all levels of the company, Group, RATP departments, major subsidiaries and, since 2013, smaller RATP Dev subsidiaries. It allows a shared vision of the Group's different entities, and ultimately highlights best practices to apply across the Board.

Group or corporate mapping presents threatening events at Group level; these are company-wide risks, still referred to as "Comex" risks, because each of these risks is placed under the responsibility of an Executive Committee member depending on its type. The member of the Executive Committee appoints a risk owner, who is required to control it (risk management and control).

In addition, risks that require a cross-functional approach involving several departments are dealt with specifically through work led by the head of risk management.

A network of risk management correspondents manage risk processes at department and subsidiary level and effectively relay risk management procedures at their level.

The system was initiated in 2010. It has enabled a comprehensive analysis and inventory of the risks facing RATP group along with the associated prevention and protection strategies. Status updates are performed periodically.

2.1.2 DEPLOYMENT OF THE RISK MANAGEMENT PROCESS IN THE GROUP

At year-end 2016, the specific mapping of threatening events for each of the identified company-wide risks in the Group's 2012 mapping was more than 90% complete, with a progress rate of 81% for the management plans for the maps concerned.

In line with the three-year plan for the method applied by RATP group, the new 2015 risk map was validated in June 2016. It was completely redone on the basis of interviews with each of the Group's senior executives and surveys conducted within executive committees. The Executive Committee identified 26 major risks.

It is recalled that this method is obviously applied within departments and subsidiaries for each of the risks identified as the most critical in these entities. The new risk map resulted in a complete overhaul of the work previously undertaken in these structures. In addition, certain departments included the risk management methodology in the process for ISO 9001:2015 certification, focusing on quality and risk management.

RATP Dev is actively involved in working groups on company-wide risk. Its professionals actively contribute their expertise on both risk matters and the subsidiary's business environment (competitive environment, geographic scope, etc.).

Its deployment to RATP Dev's smaller subsidiaries began in 2013, and by end of 2016, 34 subsidiaries had been covered. Risk mapping enables the risks specific to each entity to be identified alongside risk affecting all subsidiaries, RATP Dev and RATP. The process is therefore cascaded to all Group levels, from the corporate level to operational entities and customer service, with genuine mutual benefits.

2.1.3 CHANGES IN RISK MANAGEMENT

Following an analysis of the maturity of RATP's risk management conducted at year-end 2014, the Group approved a risk management improvement program. It consists of three main components:

- the establishment of a Risk Committee to ensure better monitoring of risk mitigation actions;

- the implementation of an RMIS (Risk management information system), bringing together risk management, internal audit, internal control and insurance management;
- the creation of a training program on risk culture for managers.

Certain corresponding projects were implemented in 2016:

- the Risk Committee is preparing for Q1 2017 and will forge links between risk owners based on KRI (Key risk indicators) which are currently being defined;
- the RMIS was subject to an RFI (Request for information) and specifications in order to prepare the consultation of the market;
- training on the risk culture will be studied in 2017, based on e-learning.

In addition to these measures, and since November 1 2016, the insurance and risk roles have been combined within the risk management department in order to take into account mitigation measures, including transfer to the insurance market for major risks.

2.1.4 COMPANY-WIDE RISKS

Company-wide risks, 26 in all, are risks identified as major at RATP group level, in each of the areas:

- strategy/commercial, in the context of the Group's development and competition;
- operational, linked to the risks of all kinds of accidents in RATP's core business as provider of railway and road transportation services;
- human resources of a Group employing more than 59,000 people (labor-management conflicts, professional risks);
- economic and financial, in connection with the Group's development on an international scale;
- the health environment, as part of the company's workforce and environmental responsibility;
- criminal/civil liability, in connection with the company's increasing judicialisation.

Based on the latest maps, there are ongoing efforts to define formal risk management plans for coping with these threatening events identified as highly critical, for each of the company-wide risks. The challenge of this analysis is to clearly identify potential vulnerabilities (insufficient control in terms of prevention or risk coverage) and propose, as applicable, action plans to reduce them.

It is recalled that this method is obviously applied within departments and subsidiaries for each of the risks identified as the most critical in these entities.

2.1.4.1 Development risk

The Group's development entails a particularly high risk. Expert working groups have conducted in-depth reviews of the most sensitive issues for RATP.

Security and health risks for RATP group employees who contribute to the Group's development as missionaries or expatriates were

thoroughly analysed in 2014, and the action plans have been implemented in the form of:

- a general instruction focused on security abroad;
- a general instruction focused on the travel policy;
- a dedicated structure integrated into the DGMR;
- an information system for risk management internationally.

2.1.4.2 Compliance risks

Under the impetus of American and British compliance legislation, in particular the American Foreign Corrupt Practices Act (FCPA) (1977) and the British UK Bribery Act (2010), legislation compliance requirements have increased in recent years. In France, the so-called "Sapin II" law, adopted on 8 November, highlights the crackdown on corruption with the enforcement of extraterritoriality of standards and a duty of increased vigilance for partners.

Taking into account the risk analysis required by the law, the Group compliance function was integrated within the DGMR.

Target risks include risks regarding the corruption to which RATP group may be exposed, either because it is the prime contractor (buyer) or because it is the tenderer (supplier).

Compliance with rules on competition, fraud and conflicts of interest will form part of other subjects handled by the Group Compliance function.

Personal data protection will be dealt with under the framework of European regulation 2016/679, which will be applied immediately as of 25 May, 2018. The data protection officer will advise on the changes that need to be implemented within the organisation.

2.1.4.3 Ethical risks

As a result of changes in the financial and legal environments, as well as in the media, both nationally and internationally, at year-end 2016 RATP group created an Ethics, CSR and Compliance Committee (Cersec), implemented as of 1 January 2017. Due to the Group's growing international activity and the increase in the risk factors resulting from said activity in all areas, in addition to the importance given to national and supranational legislation in relation to corruption, competition and data processing, the respect of human rights and sustainable development, and also the sensitivity of religious issues, discrimination and different forms of harassment and issues of diversity, the company's ethics policy, compliance program and CSR policy must be articulated coherently.

This Committee, to be chaired by the President and CEO, was assigned a dual role:

- firstly, to develop a culture of ethics and integrity by defining and promoting shared values within the Group, as well as the applicable regulations;
- secondly, to evaluate the efficacy of the programs, including the compliance programs implemented by the departments and subsidiaries.

Three priority aspects have been identified:

- firstly, ensure that we “travailler-ensemble” (work together) in accordance with the rules of gender neutrality and equality, by practicing inclusive diversity;
- secondly, strengthen the tools to prevent the risk of corruption and any type of financial crime, in accordance with national and international regulations, notably the Sapin II law;
- and finally, reinforce the example set by the Group in terms of the environmental policy.

As a result of this decision, RATP group reaffirms its previous commitments in relation to the UITP Charter (International association of public transport) in 1999 and the United Nations Global Compact in 2003, the National accessibility charter in 2003 and the company diversity charter in 2004. It confirms the six ethical values that open the Ethics Code adopted in 2011, which form the basis for the three areas of business ethics, employer ethics and citizen ethics. Finally, it attests its commitment to deploy the “Work together” plan throughout all of RATP and the French subsidiaries. This plan was published on 25 February 2015 to promote the values of secularism, neutrality and non-discrimination, and the importance placed on gender equality.

The Ethics Department was created at the end of 2015 and acts as the secretary of the Cersec. It organises its work in conjunction with the CSR Manager, who now reports to the SID Department and the Compliance Manager and will be appointed at the start of 2017.

Each department and subsidiary will therefore prepare action programs to present updates, areas for improvement and the actions proposed in the different fields of ethics, compliance and CSR. A major awareness-raising and training program will be conducted in conjunction with the Human Resources Department to ensure that each manager, anywhere in the world, who is confronted with a sensitive and unprecedented situation, is able to make a decision that is fair, respectful of our values, in compliance with the law and mindful of RATP group’s stakeholders.

2.1.4.4 Legal risks

The company’s Legal Department provides advice and analysis, draws up contracts, handles claims and disputes, and provides legal training for all the company’s business activities. It prepares for or initiates change, makes proposals to the public authorities, monitors legal developments (other than those relating to technical matters), disseminates information on best practice, assesses risk – in close collaboration with RATP’s head of risk management – and sets up insurance coverage. It ensures the company’s legal representation in all jurisdictions. Where appropriate, it assists the different entities within the Group, taking confidentiality and financial imperatives into account.

The department’s permanent primary objective, as it provides support to all levels of the company, is to ensure that the legal aspects of all the projects and operations undertaken by the company are secure and compliant.

In 2016, the Legal Department assisted with several issues and the following strategic areas in particular:

- the handling of strategic competitive challenges at institutional and organisational level;

- monitoring of European cases, in particular those relating to State support;
- the transposition of directives on public procurement and concessions (lobbying on the transposition texts, update of the IM with RATP procurement codes and purchasing guide);
- development in Île-de-France by contributing in particular to the definition of the strategy, actions to be undertaken and monitoring of responses to calls for tender;
- the monitoring of network development projects (including the Grand Paris project);
- support for operators in relation to the deployment of the guidelines on environmental law and urban planning procedures, as well as the application of changes to environmental law;
- the application of the law relating to the energy transition for green growth, in particular for buses;
- relations with the Île-de-France transport authority (legal aspects for a number of common issues, notably those relating to the operation of services, assets, asset ownership, ticketing, protection of the brand and data transfers) and monitoring of the execution and application of the new agreement with the Île-de-France transport authority;
- the development of research, development and innovation contracts (protection and promotion of RATP’s know-how);
- monitoring changes in personal data protection (community regulations) and procedures for the provision of data to the public (open data – Macron and Lemaire laws);
- the analysis of legal risks, notably in regard to the monitoring of projects, and the defining and enforcing of contracts in order to ensure the company’s performance;
- the protection of RATP’s business assets (problems related to the status of vitally important operators) and the security of the information systems;
- legal aspects of the fight against fraud and territorial control: recovery of fines, improving texts relating to security and fraud, participation in the Transportation Safety committee, actions in support of vulnerable persons;
- issues arising in relation to the fight against racism and discrimination or secularism;
- overseeing the implementation, within RATP group, of a structured compliance initiative, if necessary in collaboration with external providers with international expertise in this area.

2.1.4.5 Financial risks

The management control function is shared by the Central Management Control Department (hereinafter the CGF Department) and the company departments represented by the network of management controllers, who report to the departmental managers.

Management control is implemented through an annual process known as the “management cycle”, the purpose of which is to monitor operating and capital expenditure budgets and the structural phases of business management (such as the Île-de-France transport authority agreement and department contractual objectives).

It is based on ongoing discussions between the CGF Department and all lines of business at various process stages (multi-annual forecasting, budgeting, reviewing forecasts for the current year and analysis of results).



These processes use technical tools shared by central management control and department management control, which ensure homogeneity and traceability.

The management cycle is used to steer business performance.

The operating management cycle is divided into three major sub-processes:

- the medium-term, four-year business plan (current and three following years): the objective is to manage financial risk and medium-term performance through projections relating to productivity, management developments and new services; ensuring consistency with the business plan is the priority for reviews at this stage;
- the budget has a one-year framework: the key focus of analysis at this stage is ensuring consistency with each department's contractual objectives; verification is also performed to ensure that departments' aggregate budgets comply with company targets; analysis of variations from the previous year are performed on major causes, *e.g.* new services, productivity, management changes or new requirements, inter-department transfers (internal changes in scope), and price developments; changes in staffing levels are also reviewed and analysed at this stage;
- reports on production objectives, quality of service, change actions and, lastly, financial parameters are produced four times a year; the analysis covers, firstly, the objectives of the Île-de-France transport authority agreement for the quality of service portion and production, and secondly, the analysis of the objectives specific to each department; for the financial portion, analysis by major causes (see above) by reference to the balance with the business plan and the agreement with the Île-de-France transport authority.

The "capital expenditure" management cycle is also broken down into three major sub-processes:

- updating the capital expenditure master plans: this annual update is performed for a ten-year period with the objective of determining upcoming capital expenditure in line with company strategy. This process was strengthened in 2016 by means of a framing and prioritisation initiative for the first five years (2016/2020), in accordance with the capacity to be financed as a result of the agreement signed with the Île-de-France transport authority. This initiative also helps meet the contractual reporting requirements defined with the Île-de-France transport authority;
- the capital expenditure decision-making process ensures that each decision to invest is relevant and fully reasoned; it initiates the opening of accounts authorising the project launch; since 2015, major projects have been submitted to the Commitments Board prior to investment decisions;
- project and project portfolio review: updates and reviews are performed half yearly; they ensure that projects are executed properly and that deliverables are obtained within the expected deadlines and budgets; these reviews also enable forecasts and controls of annual expenditure, and the associated impact on debt; the second half-yearly review is used to determine the budget for the following year.

Internal financial and accounting control procedures, including controls on subsidiaries, are presented in greater detail in section 3 of this report.

2.1.4.6 Procurement risk

The department in charge of real estate, procurement and logistics contributes to controlling procurement risks by:

- providing internal communication on best practice, including regularly updating procurement guidelines, informing buyers and legal staff of the reservations and observations made after each review by the Procurement Board, and organising the procurement and logistics networks;
- reviewing files relating to purchases in excess of €750 million and submitting purchases of over €5 million to the Procurement Board;
- preparing monthly, half-yearly and annual reports on procurement for the TTTM committee, and an annual report on the work of the Procurement Board.

During 2016, significant work included:

- the deployment of the procurement information system HA-IS in Q1 2016 for buyers and 60 procurement managers, with mandatory classroom training for users. As a reminder, HA-IS enables the standardisation of processes and practices among departments, it traces exchanges with suppliers and validates key phases of procedures;
- the transposition of new public procurement rules into RATP's procurement code with the Legal Department (new code available at the end of year/start of 2017) and the subsequent adaptation of the HA Guide (HAD-JUR thematic fact sheets, editorial guides from the AMC, RPC, etc.);
- maintenance of the qualitative level of the offering of the Purchasing Academy with four "Financial analysis" modules offered over the year, overhaul of the "Managing supplier risk" pilot in two modules and in collaboration with the Legal Department, adapting to new public procurement rules and organisation of the "How to build a purchase record" module, not forgetting access to the legal modules offered by the Legal Department on more specific areas (specifically works and external services);
- inclusion in the HA guidelines of the "Tell us once" practices which have been a success (bidding with links to digital storage areas and bidding with referral to documents already provided during a previous consultation). The MPS system is currently being studied for inclusion by the editor of the HA-IS. However, there is uncertainty surrounding the future of this system which is only valid for French bids, in light of the new European Single Procurement Document expected in 2018;
- the CSR mapping of HA segments for better identification of the CSR challenges and CSR actions to be launched and completed;
- the implementation of an upstream platform for purchases and reporting.

2.1.4.7 Risks linked to information systems, telecommunications and cybercrimes

Since 2003, the company has implemented an information security policy, which sets out the principles and rules governing the confidentiality, integrity and continuity of information systems. The policy is enforced by an Information systems security manager through a structured functional network of contact persons in each RATP department.

The company applies information security ISO 27002 standard to implement best practice. Various measures have therefore been taken such as:

- defining and establishing a security policy to manage passwords;
- defining and implementing a single, centralised authentication strategy;
- introducing in-depth security mechanisms such as gateways, firewalls, DMZ, key management infrastructure, antivirus, antispy applications, etc.;
- promoting awareness of information systems security and training all Information Systems Department employees;
- systematically including security and confidentiality clauses in contracts to safeguard information property, thus enabling stringent control over IT development and maintenance activities;
- performing systems and technical audits (self-testing, vulnerability audits, intrusion testing, etc.), along with feedback sessions, exercises and simulations to verify compliance with security policies;
- implementing incident management processes to ensure that all incidents are reported to the line managers responsible for Information Systems security.

In addition to implementing best practice, the company has approved a road map relating to information system security in order to fulfill two major objectives:

1. to establish information systems security governance:
 - actions relating to information system security are overseen to guarantee that the systems implemented are adequate in terms of the challenges facing the business,
 - the security function is based on a risk management initiative already launched within RATP's departments: the mapping of information system security risks was updated and validated for all departments in 2016, and management plans were prepared for one or several major risks. The implementation of management plans continued in 2016/2017. The security function also defined risk mapping for the subsidiaries Ixxi and RATP Dev,
 - the information system security policy, dating from 2003, was updated to take into account new challenges facing the Group. The main changes relate to the inclusion of the ISS risks initiative as a basis for ISS, the extension of the scope of application to all information systems (including industrial systems) and entities within RATP group (RATP, subsidiaries, etc.) as well as the alignment of best practice in this area,
 - under the Military Programming law, and with the support of the ING, GDI and MOP Departments, the security function defined a gap analysis and an initial action plan,
 - the issue of financing cyber risks by means of an insurance company was studied in 2015. This study complements the risk management initiative by including contractual and legal aspects. The conclusions of the study were presented to executive management in 2016,
 - the audit plan checked the security level of around 15 information systems, including the industrial transport and energy systems (TETRA, Octys L3, PCE, and various rolling stock: MI09, MP05, TW10); the first Group-wide audit campaigns were also

launched (RATP Dev CasaTram). The definition and implementation of the corresponding action plans began in 2016 and continued in 2017,

- an awareness-raising campaign on information system security for all employees was implemented throughout 2016;
2. increase the effectiveness of operational information systems management by implementing:
 - the operational security center, deployed on the most exposed information systems, in order to develop the Group's analysis capacity and real-time control, and also to guarantee rapid and consistent action in the event of security incidents (hacking, mass virus attack, etc.). It is operated by a specialist provider,
 - segmentation and fragmentation of flows which will be implemented depending on the criticality and degree of confidentiality of the data exchanged as part of the renewal of the core of the transmission network,
 - a data protection system (hard drive encryption) is also being deployed for workstations, in particular for roaming users who store sensitive data,
 - support for the digital initiatives, in particular the different mobility projects, was introduced to better understand the security dimension. An information system security guide is being prepared for the "big data" and "IoT" (Internet of Things) projects.

With regard to cybercrime, RATP commissioned a detailed study of all technical, organisational and legal aspects of the potential vulnerabilities of its Information systems (IS) in 2014. The study covered the typologies of the different systems and representatives of RATP's IT system as a whole (business network access, transport industrial systems, ticketing system, support functions systems). The purpose of the study was to propose actions to reduce cyber risk, and determine the suitability of contracting a specific insurance policy to cover it.

The study was presented to the Executive Committee in June for follow-up in 2016 and 2017:

- alignment of the Vitrally important information systems (VIIS) with regard to the Military programming law (LPM);
- extension of the audits within the subsidiary scope;
- the initial approach in relation to the insurance market for financial cover and associated services;
- adaption of the organisation to European regulation 2016/679 on personal data protection.

2.1.4.8 Human resources risks

These risks can be broken down into three categories.

Professional risks

The company-wide project to prevent and reduce the number of industrial accidents was launched in 2016. To begin, an inventory was taken of all workplace accidents over the last ten years and working groups were launched to define aspects/projects to significantly and permanently reduce industrial accidents.



Other measures for the prevention of professional risks include:

- the continued deployment of the assessment and prevention process for work hardship, and support for the departments in terms of implementation;
- formalisation of the external companies management process in terms of prevention: introduction of a guide and standard documents (prevention plan and appendices), development of associated professionalisation training;
- continuation of specific training on risk prevention linked to driving motorcycles;
- the pending update of the IG 539 linked to the use of chemical products at the company;
- the multi-disciplinary work performed with the main stakeholders in the process, particularly occupational doctors responsible for the toxicological unit;
- the implementation of a regulatory company-wide monitoring process for risk prevention and occupational health;
- participation in the ongoing update of the Flood Risk Prevention Plan;
- support for the company's certification plan, in particular through training and organisation of the network of auditors for OHSAS 18001 certification.

In 2016, in order to demonstrate the company's commitment to the prevention of psychosocial risks, the support and advisory platform contributed specifically to services such as:

- the implementation of a procedure for the human resources area for the prevention of harassment;
- the continuation of the "psychosocial risks: understand and take action" training programs for all team managers, heads of human resources, Health and Safety Committee members and staff, and departmental heads;
- continuation of a new training course for human resources managers, which includes a section on HR's role in preventing psychosocial risks;
- integration into the new HR training curriculum for assistant HR managers of a section on preventing psychosocial risks;
- continued collaboration between the consulting and support platform and the occupational health officers.

Risk of skill loss

Control of the risk of losing key skills forms part of the overall human resources policy. It aims to create barriers to avoid any loss of skills in a key area that affects the entire company. This relates to critical skills, areas with highly sought after skills, areas with high turnover rates (demography, retirement, etc.) or even skills provided by a company-wide sector.

By way of example:

- the initiative for "management of the risk of skill loss in railway safety" initiated in 2013 and included in project 2.2 of the strategic plan, aims to strengthen and develop the key skills within railway safety which are necessary to ensure proper operation. In 2016, three network meetings and one profile review were held. A deliverable on railway safety training is in the process of being completed;

- the "job and skills forecast management operation": closely related to the sub-project 6.3 of the strategic plan, this initiative, launched in 2016, aims to construct a comprehensive HR policy. It supports the development of subsidiaries by retaining the skills required to ensure RATP's competitiveness. Three network meetings were held in 2016. An ongoing deliverable for 2017 on the preparation of "business identity fact sheets" based on a common model of Epic/Group profiles (PSTG) provides visibility on the key stages for building a career within the Group.

Further, the company's human resources master plan takes into account the risk of losing key and so-called "critical" skills by identifying those that hold these skills within the departments and the related action plans to address the issue. Thus, in 2016, around 40 key skills held by 170 employees, 30% of whom were senior employees, were identified for eight departments.

Labor dispute prevention

As implemented in the company since 1996 and required by law since 21 August, 2007 and 19 March, 2012, all strike warnings must be preceded by collective bargaining, initiated by notices to bargain and having ended in disagreement between union and employer representatives.

Notices to bargain may be served at any level of corporate decision-making (core, department or unit) as appropriate in terms of the matter raised and provided that the matter is collective. A meeting is held between the department affected by the matter and the union(s) that served the notice to bargain.

If the parties reach an agreement or find solutions to the matter, a binding statement of agreement is drafted and signed by the parties further to the meeting. The same applies if no agreement is reached; in this case a statement of disagreement is drafted and signed.

The statement is then sent to all unions at the level at which the notice to bargain was served.

Thereafter, and only in case of disagreement, the trade unions that served the notice to bargain have the opportunity during the following month to file a strike warning on the same issue. The warning shall not take effect until five clear days after filing.

In accordance with service continuity requirements, RATP has a contractual obligation under the Transport Plan agreed with the Île-de-France transport authority to provide a minimum level of service at all times.

The system continues to fulfill its purpose as a means of preventing labor disputes, as 95% of matters dealt with by collective bargaining do not result in strike action. In addition, we observed a 30% fall in the number of notices to bargain between 2015 and 2016.

2.1.4.9 Corporate risks and fire risks

The General safety control (GSC) Department aims to ensure that the processes to limit system risks are correctly defined and implemented under the direct responsibility of the departments and the units in charge of this. Its role is also to improve RATP's fire safety measures.

At the request of the managers concerned, it may also work for RATP group subsidiaries.

The GSC Department is assisted in its work by two separate units: the Corporate Risk Management (CRM) unit and the Fire Safety (FS) unit.

The role of the Corporate Risk Management unit, at the request of executive management or the departments, is to:

- oversee the risk management system;
- conduct methodological studies on safety (potential context and events);
- perform systems reviews, appraisals, risk assessments, determine risks of human error, and gather operational feedback on rail transport matters;
- analyse daily operating reports on guided transport networks;
- run the special railway safety committees;
- raise awareness of systems risk management policies.

In addition, for corporate risk management purposes, each month the Corporate Risk Management unit of the General Safety Control Department prepares a dashboard on danger signal alerts, based on data provided by the operating and maintenance Departments of the metro, RER and tramway networks. The document reports reasoned recommendations on each identified risk. It is sent to executive management and to the departments concerned to produce corrective measures which are then tracked per network (metro, RER and tramway) by the Committees of Railway Safety Directors chaired by the head of the Railway Safety unit.

The Fire Safety unit deals with all aspects of fire safety and evacuation procedures. Its aim is to:

- constantly improve fire safety within the company;
- organise feedback sessions on fire safety in railway systems;
- coordinate emergency fire services with the company's fire safety measures;
- monitor operating premises and projects under construction;
- train employees in fire safety;
- enforce regulatory compliance with fire safety procedures and systems in railway stations, metro stations and buildings, through the work of the Inspectorate General for Fire Safety.

The General Safety Control Fire Safety unit is responsible, together with the concerned departments, for improving the fire safety level of the guided public transport systems.

It provides technical support to the Inspectorate General for Fire Safety as set out in article 2 of the order of 24 December, 2007 approving the safety rules governing fire safety and panic risk in stations.

The Fire Safety unit is active at all levels of the company, through the work of the Technical Committee for Fire Safety and its network of local contacts.

The unit performs smoke and fire tests to measure and analyse air movement in underground areas. The results of the tests are used to improve the security of the underground areas, by preparing and updating recommendations for the smoke-clearing systems in tunnels and stations.

2.1.4.10 Infrastructure risks

The main purpose of the Infrastructure Management division is to guarantee the global safety (railway security, fire safety and the safety of goods and people) of equipment used by the operator. The Infrastructure Management division (GDI) ensures that RATP's infrastructure and equipment are sustainable, reliable and in working order.

Since its set up on January 1, 2012, the Infrastructure Management division has assumed the corporate risk management responsibilities applicable to its scope. Risks identified under these procedures are analysed in detail, and risk management plans are implemented to detect weaknesses and find means of reducing RATP's exposure to such risks. The risk management plans back up the maintenance systems implemented by the Infrastructure Management division, providing daily maintenance for equipment used by the transport operations activity.

Each month, the Infrastructure Management division issues reports on preventive maintenance performance and equipment availability.

Furthermore, unit and department inspections monitor incidents on a daily basis, regardless of the network, and analyse them together with the maintenance agents.

Incidents are then discussed and tracked weekly by the Executive Committee.

These discussions provide data for the "quarterly incidents" meetings during which equipment availability indicators are studied (in addition to monthly reviews) and major incidents with an impact on availability or the highest recurrence rate, are raised, studied and all actions are monitored until their full completion.

This meeting is followed by a safety meeting chaired by the department director and held with each of the operating units. All safety indicators are studied (railway, fire, property and people) and ongoing action plans are reviewed. Since the beginning of 2016, first level controls, performed within the operational units, were included in the table for monitoring safety indicators: railway safety and safety of goods and people.

An operational feedback process has also been in force for fifteen years in the EST Department, followed by the Infrastructure Management division (GDI) and the Engineering and Project Development Department (ING), monitoring major incidents where specific action is required for implementation. Feedback reports are issued quarterly. The ING and MOP Departments are involved. In addition, a company-wide operational feedback process will be implemented and managed by GSC of GDI.

When there are regulatory or technical developments concerning equipment, each business line's Technical Committee reviews them and assesses their impact and feasibility.

For lines 4 and 6, specific monitoring is in place (and started on line 13), called "Task Force", to control the restoration of all infrastructure installations, and involving other departments if this is the case.



2.1.4.11 Environmental risks

The Group relies on the following to control environmental and company-wide risks:

- team of experts in regulations on environmentally-classified facilities (ICPE);
- RATP laboratory accredited by the French national accreditation body (Cofrac);
- toxicology unit in the Occupational Health Department;
- network of internal ISO 14001 and ISO 9001 auditors;
- an environment network comprised of teams working on the environment and from all departments;
- safety adviser on the transportation of hazardous goods.

Industrial sites

Each industrial site with a significant impact on the environment is ISO 14001-certified or at least equipped with an environmental management system. To ensure control of its critical environmental risks, RATP has also deployed an environmental management system for all its environmentally-classified sites (ICPE) as defined by French regulation.

Under the Île-de-France transport authority 2016-2020 agreement, RATP is committed to obtaining ISO 14001 certification for all of its industrial sites by 2020. At the end of 2016, 75% of industrial sites were ISO 14001-certified and 81% of these sites had an environmental management system. This process is monitored under the Group quality certification plan 2015-2017.

Air quality

RATP constantly monitors air quality in its underground networks. The data has been available on RATP's website www.ratp.fr, and in RATP's open data forum since summer 2012.

In 2016, a scientific committee, which brings together renowned experts from fields such as metrology, Occupational Health and Public Health, was created to help the company prioritise studies and validate the experimental protocols implemented.

Mapping of dust accumulation on the platforms was conducted in 2016 for all of the network's underground stations.

Electromagnetic fields

RATP's Electromagnetic Fields Committee monitors technical and regulatory developments on "health and radiofrequencies". It ensures that the company complies with French decree 2016-1074 of 3 August 2016 relating to the protection of workers against the risks of electromagnetic fields.

2.1.4.12 Risks and crisis management

Crisis management

In 2016, RATP had the opportunity to test, on two occasions, its business continuity plan and flood risk protection plan, firstly during the Sequana drill in March 2016, and then during the flooding of the Seine at the end of May/start of June 2016.

RATP was heavily involved in the Sequana 2016 drill to manage the 100-year flood of Paris organised by the Paris Civil Security Force from 7 to 18 March 2016. The company mobilised a crisis room during three days of the flood phase and provided working groups for the subsidence phase. On this occasion, the crisis unit and the Permanent Support unit were moved for an entire day to the Championnet support site.

Protective structures were installed at certain metro stations close to the Seine.

RATP was then fully mobilised during the flooding of the Seine in June 2016 and implemented the actions provided in its flood risk protection plan. In particular, RATP implemented a crisis unit from 1 June 2016 and activated its crisis communication command post on June 3 2016.

The flooding of the Seine, which was the largest in thirty years, only had a minor impact on the RATP network, since the flood peak was reached just before triggering the launch of the first protective structures and closing of the metro and RER stations.

Following these events, RATP conducted detailed feedback sessions both internally and with its main partners (Paris Civil Security Force, SNCF, Ville de Paris and DRIEE).

This operational feedback was presented to the Executive Committee in October 2016, who approved a short- and medium-term action plan.

Crisis communication

A dedicated team within the Communications Department handles crisis communication and communication on sensitive matters. It is involved whenever a crisis arises at RATP group.

In March 2016, it took part in the EU Sequana drill organised by the *Préfecture de Police de Paris* and the Paris Civil Security Force, in September it participated in the civil security drill organised by the *Préfecture* of the Hauts-de-Seine, and in November, it took part in the major drill organised by the company's General Safety Control Department in partnership with the Paris Fire Department.

During 2016, the sensitive communication and crisis unit was mobilised several times for monitoring and advisory duties. It was present at the crisis room every time it was activated:

Event	Activation of crisis communication command post	Activation of crisis room	Dates
Interruption line 1	yes	no	22 January 2016
Accident refrigeration truck/RER B	yes	yes	25 May 2016
Flooding of the Seine and the Marne	monitoring active	monitoring active	from 31 May to 2 June 2016
Flooding of the Seine and the Marne	yes	yes	from 2 to 3 June 2016
David Guetta concert/Champs de Mars	yes in crisis room	yes	9 June 2016
UEFA Euro 2016 final (Stade de France)	yes in crisis room	yes	10 July 2016
Fallen overhead lines on line A following work to update the tracks and ballast	no	yes	23 August 2016
Derailing following late stoppage of line B	no	yes	11 August 2016

Outside of crisis situations, the unit continued to prepare and update communication plans for specific crisis scenarios with the input of risk owners.

It also cooperated with the procedures implemented by public authorities (e.g. regional prefectures, Paris civil security force, etc.) to protect populations against pandemics, storms, flooding or terrorist attacks. In July 2016, when the public authorities triggered level 3 of the Canicule heat wave plan, it implemented the measures specified in the agreement with Santé publique (“public health”) France (information, announcements, etc.).

Finally, it continues to develop its networks outside the company, with presentations in various “grandes écoles” and French Government offices (in 2016, Écoles des ponts, French delegation for defense information and communication, etc.) and regularly conducts exchanges with other companies (in 2016, Areva).

Support for victims

- Since 1 February, 2008, the mediator has been called the “victim support representative”. RATP set up the victim support function in order to translate into action its determination to assist the victims of accidents occurring during normal operations on its network. Questions of responsibility are set aside as the function focuses solely on human concerns. The active presence of the victim support representative shows victims and their families that the company is by their side.
- The representative is systematically informed of any instance of bodily injury. Additionally, the Permanent Support unit systematically reports all instances in which a vulnerable individual falls in a bus or tramway (e.g. children in strollers or seniors over age 60) to the victim support representative. It may ask the operational unit to provide background to understand the situation, and contact the victim or the victim’s family in order to express the company’s concern and provide assistance, as appropriate. In return, the representative informs managers of the bus and railway operating units of the seriousness of victims’ injuries. Employees involved in accidents, particularly operators, often wish to be informed of victims’ state of health and progress.

In case of a major collective accident, the comprehensive care of victims requires that attention be shared between:

- a crisis room;
- presence on the scene of the accident, depending on its scope; thanks to around 30 volunteers registered in the system to date. This network is set to expand. Information and awareness sessions are held throughout the year;
- mobilising the customer service call center through the opening of a toll-free line and the use of Sinus to provide victims’ families or other individuals with information on the identities of victims, their condition, and where they have been taken to. The Sinus tool provides this real-time information and is used both by the call center staff and the *Préfecture* of Paris;
- an agreement was signed in 2016 with an assistance company which offers various aid and transport services to the victims and their family.

This now forms part of the response process of the Victim Support unit. It is inevitably linked with external stakeholders, in particular the Interministerial Victim Support unit.

Furthermore, a partnership has been established between RATP and the Fédération des victimes d’attentats et d’accidents collectifs – SOS Catastrophes et terrorisme (Fenvac – National federation of victims of group attacks and accidents – SOS Disasters and terrorism) by the signing of an agreement which has been renewed annually since 2013.

In this agreement, the two parties undertake to contribute to the review of crisis management in the event of the occurrence of a group accident or attack, to allow the Fenvac to tailor its considerable experience acquired from working with victims of accidents and attacks to the specific sector of public transport.

2.2 THE INTERNAL CONTROL FUNCTION FOR OPERATIONAL MANAGEMENT

Within RATP group, internal control is considered an important factor in its commitment to excellence and to meeting the highest international standards.

As part of an approach focused on global performance and progress, it facilitates:

- improved operational management through the sharing of results between managers and their teams, throughout the management chain;
- the implementation of control tools to provide reasonable assurance on risk control and the achievement of the objectives expressed in the company strategy.

At the local level, the RATP internal control is under the direct responsibility of local managers who exercise first level controls closest to operations. This first level control ensures the regular assessment of the effectiveness of the implemented work procedures.

Support and control groups are on hand to assist managers in achieving their goals by providing expertise and measuring performance. The management control, human resource and procurement functions perform these roles. The internal control function helps operational management conduct first level controls.

The activity of the internal control system, under the responsibility of the Internal Audit unit, was established by the President in two successive mission statements in order to ensure:

- the identification of obligatory first level controls to be deployed in operating units aligned with significant risks;
- the development of control support tools for managers responsible for their implementation;
- reporting of control results.

In 2016, internal control entered into a new phase of alignment in relation to best practices. Significant events are the signing of reference documents such as attestations of commitment by the managers of the operating and maintenance departments, communication at all company levels with, notably, the distribution of leaflets for managers responsible for controls within the operating units, and the internal publication of the general policy document on the internal control system.

This year, the network worked on a bimonthly cycle of five meetings, along with a one-day seminar on sharing experiences with internal control managers in large industrial groups.

Projects dealt with, as a matter of priority, the organising of the internal control and reporting tools between the different levels of responsibility, improvement of the control guidelines with regard to results, thoughts requested as part of the project to implement a risk management information system and the entry of new stakeholders in the system to structure internal control with the project and environment function for the Group's subsidiaries. Several working groups and three advisory missions were conducted in this respect in addition to managing the function.

Internal control continued with its ambition to support RATP group in confirming its status as an international group with the best standards worldwide.

(4) Instruction 432D of November 2013, article 2.2.

(5) Members of the Executive Committee, department heads and chief operating officers.

2.3 THE AUDIT FUNCTION

2.3.1 BUSINESS LINE AUDIT/INSPECTION STRUCTURES

Audit/inspection structures attached to different company departments intervene independently of the management chain.

Their intervention covers all processes and units in their department (audit and/or technical inspection duties). In particular, it allows the implementation and the effectiveness of the first level controls to be assessed.

2.3.2 COMPANY-WIDE STRUCTURES ATTACHED TO EXECUTIVE MANAGEMENT

The Internal Audit Department

It reports to the President, is responsible for the following on behalf of executive management:

- internal audits to “provide assurance on the level of control over operations by auditing and assessing the business activities of RATP group”⁽⁴⁾. In November 2013, the scope of action was expanded with the implementation of flash audits for the evaluation of the status of action plans;
- providing guidance on change management (e.g. REX, formation of internal controls, etc.).

The Group audit procedure supports the company's executive management in its decision-making process:

- the audit focuses on the company's major risks (financial and regulatory) and strategic priorities, including economic performance, process efficiency and high quality management;
- the audit responds rapidly to the company's needs and *ad hoc* assignments are performed alongside the planned annual work, as required;
- the audit methods are aimed at inciting the audited units to share findings and implement corrective measures (findings are objective and quantified, their analysis is transparent, draft written reports are submitted by the audited units for discussion of audit findings).

The internal audit work is part of an annual plan established on the basis of input from members of the Executive Committee⁽⁵⁾ and the main risks identified during RATP's risk mapping process. When each audit is completed, a written report is sent to the Chief Executive Officer and other members of the Executive Committee, and to the heads and managers of the departments and units directly concerned. The heads and managers of the audited departments and units are asked to draft an action plan within two months of the audit, which is submitted to head of internal audit for approval. Implementation is monitored by the general directorate for audit and internal control (DGACI) and the individual who commissioned the audit, and a progress report is issued at six, twelve and eighteen months. Action plans resulting from audits of particular importance are reviewed by the Executive Committee.

This rigorous monitoring of post-audit action plans allows the percentage of audits that resulted in action plans to be measured, as well as their progress.

Lastly, the head of internal audit also plays the role of Inspector General⁽⁶⁾, which is separate from internal audit, intended to inform the President about sensitive topics or issues likely to impact the Group's economic interests.

Inspectorate general for fire safety (IGSI)

It reports to the President and is responsible for issuing formal opinions on:

- compliance with the general provisions of the safety rules governing fire safety and the panic risk in public establishments:
 - for each work file which affects spaces open to the public such as administrative applications for building permits, construction authorisations and applications to build, develop or change areas open to or used by the public, such as the train and metro stations operated by RATP;
 - for completed building work in public areas such as stations, during the preliminary inspections prior to opening to the public;
 - for regular inspections to ensure the continued operation of stations;
- compliance of guided transport infrastructure with basic safety requirements to avoid fire and panic risk and deal with the consequences of accidents.

The following were the main endeavors of the inspectorate general for fire safety in 2016:

- inspections prior to the installation of the platform facings on line 13;
- building of the line 4/line 14 connection in the Châtelet metro hub;
- the start of construction work on the multi-modal Châtelet – Les Halles site for the promenade and Berger commercial units, the Lescot and Rambuteau entrances and the Nouveau Forum hall;
- to process 12 applications for building permits including three new stations for the project to extend line 11, and 9 applications for building permits in existing stations, including, among others, the linking with the Greater Paris Express (GPE) line 15 and plans to adapt the existing stations on line 14, as well as the adaptation of existing stations on line 11;
- to issue 13 favorable opinions on the application files for permits to build, develop or change a public establishment involved in the Symphony project for centralised monitoring of fire safety including Gare du Nord and République stations;
- to issue 11 favorable opinions on applications for permits to build, develop or change a public establishment for existing stations as part of the OPAL4 operation, platforms facings;
- to process 7 applications for building permits for the stations on GPE line 15 at the request of the prefectures of the areas in question.

The Railway Safety unit

It reports to the President and is responsible for monitoring railway safety procedures throughout the company. It enforces the railway safety policy, structures and guidelines set by executive management through a systemic approach, as set out by the President.

The management and implementation of RATP's railway safety policies have been delegated by the Chief Executive Officer to the Railway Safety unit. Railway safety policies concern infrastructure, technical installations, vehicles and operating, maintenance and control policies. The Railway Safety unit sets out the framework to be followed by all of the company's railway safety managers. Responsibility for enforcing the railway safety guidelines issued by the Railway Safety unit is delegated to the directors of the departments and operating units.

The head of the Railway Safety unit may request professional advice, as appropriate, from the various departments (e.g. railway engineers, inspectors, general safety controllers). The unit is sent all surveys, studies and reports conducted on railway safety incidents.

It audits rail security and suggests preventive and corrective measures in conjunction with the departments concerned. These audits take place in accordance with the principles issued by the NF EN ISO 19011 standard of December 2002.

The unit is responsible for RATP and its subsidiaries. Its power of investigation applies to all of the Group's entities. As a result, it may be called upon to exercise its duties as part of an RATP Dev project or concession.

2.4 EXTERNAL AUDIT

As a State-owned company, RATP is subject to French Government controls, via:

- the Economic and Financial Control Board for Transport⁽⁷⁾;
- the Procurement Board, set up by the order of 11 January, 1973⁽⁸⁾ and chaired by a representative of the French national audit office.

In addition, RATP's annual financial statements and consolidated financial statements are subject to audit and the condensed half-yearly consolidated financial statements are reviewed by the Statutory Auditors (Mazars/KPMG).

RATP entered into an agreement with the Île-de-France transport authority (STIF) in 2000. The RATP-STIF agreement has regularly been updated since by riders and amendments. The fifth agreement with the Île-de-France transport authority was signed on 5 November, 2015 for the period from 1 January 2016 to 31 December, 2020. The Île-de-France transport authority is entitled to perform audits and controls on all matters relating to the agreement.

Improving quality is an on-going objective for the company. Quality control systems are in place and the company has received quality certification under French and international standards ISO 9001, 14001 and OHSAS 18001. The certifications, which are issued by independent bodies, relate to both management systems and performance in terms of environmental issues and service quality.

In 2015, a Group quality certification plan was launched for the 2015-2017 period. In line with the company's strategic guidelines (Bus2025, the objective of becoming a world leader in tramway transportation, automated metro excellence, improvement of the RER, the objective of winning the tender for line 15), this certification plan includes certifications specific to each department, unit, process, subsidiary or operating unit.

(6) Instruction 541 of November 2011.

(7) As a State-owned Industrial and commercial public utility (Epic), RATP is subject to economic and financial control by the State (French decree No. 2002-1502 of 18 December, 2002).

(8) Amended by the order of 23 March, 2005 (*Journal officiel* of 13 April, 2005).

3 Internal financial and accounting control procedures

3.1 COMPLIANCE WITH ACCOUNTING PRINCIPLES AND LEGISLATION

3.1.1 FRENCH GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

Due to its legal status as a public service company, RATP applies the same accounting principles as those generally accepted by and legally binding for commercial companies. Consequently, it applies the accounting policies set out by the French National Accounting Board in CRC regulation No. 99.03 of 29 April, 1999. However, it is also required to meet the requirements specific to public service providers.

The financial statements of RATP parent company are prepared in accordance with French generally accepted accounting principles (GAAP). RATP implements a customised chart of accounts (CoA) as approved by the inter-ministerial order of 21 March, 1985. The customised CoA was prepared in accordance with the rules, principles and framework governing the French national chart of accounts.

3.1.2 INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

RATP applies effective IFRS to prepare RATP group's consolidated financial statements.

3.1.3 THE STATUTORY AUDITORS

RATP appoints Statutory Auditors pursuant to the provisions of article 30 of law No. 84-148 of 1 March, 1984 on the financial information and audit of industrial and commercial public companies, and the provisions of article 33 of French decree No. 85-295 of 1 March, 1985⁽⁹⁾.

Following a call for tender, new Statutory Auditors were appointed for the 2015 financial year and for a term of six years (Mazars/KPMG).

3.1.4 THE AUDIT COMMITTEE

The Audit Committee presents its opinion to the Board of Directors on accounting and financial matters, particularly the accounting and estimation methods used by RATP to prepare its financial statements, the internal audit program, risk management policy, etc.

3.1.5 ACCOUNTING SEPARATION OF INFRASTRUCTURE MANAGEMENT AND TRANSPORT OPERATIONS

The European regulation on public passenger transport services by rail and road was adopted on 23 October, 2007 and became effective on 3 December, 2009. The regulation limits the duration of the operating rights granted to public passenger transport services.

In France, article 5 of the French law of 8 December, 2009 on public passenger services by rail introduced changes to the regulations governing Île-de-France area passenger transport. The law has entrusted RATP with the role of managing the infrastructure of the metro and RER networks that it operates as of 1 January, 2010.

Finally, the Grand Paris law of 3 June, 2010 specified that the activity of infrastructure management must be accounted for separately from the activity of public passenger transport operations. For each of the activities, a balance sheet and income statement must be prepared from 1 January, 2012, and must be certified annually. The law also states that all direct or indirect cross-subsidies between activities are prohibited.

Since 2012, RATP's consolidated and parent company financial statements have incorporated these provisions.

3.2 RATP FINANCIAL REPORTING

3.2.1 FINANCIAL REPORTING SYSTEM

RATP uses version R12 of the Oracle software application (new version rolled out in September 2010) for the parent company financial statements, and business financial consolidation for the consolidated financial statements.

Preparation of the parent company financial statements

Monthly financial data are available after eight working days. This leaves time for a preliminary review of the financial information during which various controls are performed. The monthly data enable management controllers in the various departments to track their level of activity and budget consumption on an on-going basis. At central corporate management control level, monthly financial reporting makes it possible to manage the risk of budget overruns and make the appropriate adjustments. In order to ensure that reporting deadlines are met, hard-close financial statements are prepared at the end of May and at the end of October, respectively. The hard-close statements are verified by the Statutory Auditors.

Preparation of the consolidated financial statements

The consolidated financial statements are prepared every semester according to a timetable set at the closing of each period by the Finance Department.

The production of the consolidated financial statements is managed by a section of the company's Accounting unit for the whole Group in order to ensure that the consolidated financial statements are prepared in accordance with current standards and regulations and that the information provides a fair presentation of the Group's business and financial position.

The annual and half-yearly financial reports are submitted to the Autorité des marchés financiers (AMF – French financial markets regulator).

A description of the procedures used to produce and control the financial information prepared by RATP is presented in appendix 3.

⁽⁹⁾ Implementing decree of law No. 84-148 of 1 March, 1984 on the prevention and out-of-court settlement of corporate difficulties.

3.2.2 INTERNAL COMMUNICATION ON BEST PRACTICE

The financial information made available to employees within the Finance Department is available on an intranet site dedicated to Finance Department employees. This new site provides information and news on the finance profession.

The professional documentation required for their professional activities is made available to employees of the Finance Department (management controllers, accountants, treasurers, tax specialists, etc.) in an electronic document management system. These reference materials range from management principles to forms and fact sheets. All subjects related to economic performance based on AMF procedures are covered.

These two tools were made available to Finance Department employees in January 2016.

3.2.3 INTERNAL ACCOUNTING AUDITS

Internal accounting audits are performed by the Corporate Accounting unit annually. Reports and action plans are issued after each audit.

The Audit unit is responsible for:

- organising and monitoring the risk management system of the company's Accounting unit, introduced by the Chief financial officer in 2012. In 2016, two risks resulted in management plans followed by action plans, bringing the number of risks managed to six out of the ten identified on the risk map;
- organising and monitoring the internal control process;
- describing and implementing a reliable audit trail for issued and received invoices, in order to meet the new demands of the tax administration.

Throughout the year, the Audit unit monitors the implementation of action plans and ensures that deadlines are met.

3.3 CONTROL OF SUBSIDIARIES

Subsidiaries are subject to specific controls by RATP parent company, aimed at managing inherent development risks. In addition to RATP's control, the subsidiary RATP Dev exercises management control over its own subsidiaries and equity investments.

3.3.1 UPSTREAM CONTROLS

Upstream controls include:

- control of subsidiaries' corporate strategy through medium-term business plans;
- control of significant decision-making issues such as those concerning budgets, the preparation of financial statements, bids on calls for tender, major contracts, capital transactions, equity investments and the founding of subdivisions within subsidiaries.

This control is exercised by each subsidiary's Commitments Board. For major subsidiaries, if the issues are significant, decision-making is also controlled by RATP's oversight bodies (the French State Equity Investment Agency, Economic and Financial Control Board for Transport, Budget Department and Maritime Transport Board).

The subsidiaries' Commitments Boards convene prior to Board (or Supervisory Board) meetings, to prepare input and guidance for decision-making.

For RATP Dev and Systra, these controls are performed by the committees set up by Supervisory Boards in conjunction with RATP's Finance Department:

- the Investment Committee (RATP Dev) and Commitments Board (Systra) for bids on calls for tender, contracts and acquisitions;
- the Finance Committee (RATP Dev) and Audit Committee (Systra) for budgets, half-year and annual reporting and medium-term business plans. These committees monitor general compliance with accounting policies, financial reporting to the supervisory boards and risk assessments.

For the other subsidiaries, control over corporate strategy is exercised by a Commitments Board, which for each subsidiary comprises representatives of the subsidiary's management team, RATP's Finance Department and RATP's executive management.

3.3.2 DOWNSTREAM CONTROLS

Downstream controls include:

- monthly financial reporting on the basis of the accounting information gathered in the consolidation software. The information is presented in the form of an operating report on the subsidiaries, which is sent to the parent company's Executive Committee. The software is used for both monthly reporting and consolidation purposes, to guarantee the consistency of the data;
- performance of audits: a complete audit of operations is performed on certain subsidiaries every year.

Upstream controls and monthly financial reporting are performed by the Finance and Management Control Department unit responsible for subsidiaries, financial transactions and tax, while audits are performed by DGACI staff (see 2.2.3).

3.3.3 OTHER CONTROLS

RATP's Board of Directors reviews the financial position of subsidiaries twice a year:

- in March, it reviews the previous year's performance and consolidated financial statements;
- in June, it reviews the outlook for the current year.

Since January 2011, a quarterly report on the RATP Dev subsidiary has been sent to the Board of Directors. The Board of Directors gives its opinion on the budget and medium-term business plan, on acquisitions and investments exceeding certain thresholds and on certain bids on calls for tender.

The consolidated budget for RATP group is presented to the Board of Directors at year end.

Appendices

Appendix 1 Board of Directors and Committees

1 The Board of Directors

In accordance with government decree No. 84-276 of 13 April, 1984, amended by decrees No. 2004-500 of 7 June, 2004, and No. 2006-1018 of 11 August, 2006, RATP's Board of Directors comprises 27 members, which include:

- nine government representatives appointed by decree;
- nine qualified persons appointed by decree:
 - two qualified persons selected for their expertise in the transport and mobility area,
 - three qualified persons with a professional background in business,
 - two representatives of public transport users,
 - two local authority representatives from areas directly affected by the company's activities;
 - nine employee representatives elected by company employees.

The Board nominates one of the directors as President and Chief Executive Officer. The appointment is made by decree by the government Ministers after the Cabinet has heard the report from the Transport Minister.

The government Commissioner and Head of the Economic and Financial Control Board for Transport are entitled to attend all Board meetings, along with the secretary or representative of the Works Committee.

The secretary of the Board is nominated by the President, and appointed by the Board of Directors. The secretary is responsible for preparing the reports and minutes of all the meetings of the Board as well as the standing and *ad hoc* committees.

The Board convenes at least six times a year, and may also hold extraordinary meetings to renew the mandate of the Board or President.

2 Board committees

Three standing committees are responsible for preparing the Board's work. Two comprise an equal number of directors, and the third is composed of the entire Board.

The first deals with the company's technical and technological modernisation and development, particularly in terms of network development and maintenance, improvement of service quality, research and contracts.

The second deals with RATP's operating budget and investment plans, financial statements and public and service provision agreements and contracts. It also addresses business and social issues such as training, housing policy, developments outside the RATP-STIF agreement, subsidiaries' activities and the annual report and sustainable development report.

The third committee, whose chair is employed by RATP, monitors performance of the RATP-STIF agreement and key performance indicators on service quality. It also examines plans for new innovative services.

The Audit Committee, comprising six directors (two elected by employees, one leading business person and three government representatives), is responsible for advising the Board on the parent company and consolidated financial statements and on the reliability of the information systems used to prepare them. It also advises on financial management, management and accounting principles, cost accounting, developments relating to accounting information systems and management control, the internal audit program and the quality of internal audit methods, and risk management policies.

Alongside management decisions, which are voted on by the Board, the President may propose issues for discussion, particularly when medium- and long-term policy-making is required.

3 Subsidiaries and shareholdings

The President appoints RATP's representative at the shareholders' meeting and Board meetings of companies in which RATP holds shareholdings, and informs the Board of the appointment. RATP's Board of Directors hears a report on each of the companies in which it holds a significant stake at least once a year, and gives its opinion on RATP Dev's medium-term (PMT) business plan.

4 Annual report and sustainable development report

RATP's annual report and sustainable development report are submitted to the Board for approval.

5 List of Directors as at 31 December 2016 (term of office 2014-2019)

	Name	Role	Other positions
GOVERNMENT REPRESENTATIVES			
Ms	Marie-Anne BACOT	Member of the Environment and Sustainable Development Council	Director of the Institute of advanced studies on the Planning and development of european regions (IHEDATE)
Ms	Élisabeth BORNE	President and Chief Executive Officer (President & CEO) of RATP	President of the Supervisory Board of RATP Dev, President of the Supervisory Board of Systra, President of the "Fer de France" inter-professional organisation
Messrs	Jean-François CARENCO	Prefect of Île-de-France and prefect of Paris	Member of the Board of Directors of SNCF-Mobilités, Chairman of the Board of Directors of Institut Gustave-Roussy, Chairman of the Board of Directors of the Agence de l'eau Seine-Normandie
	Denis CHARISSOUX	Deputy Director of the Budget Department	Director of SNCF Réseau, of the French national urban renewal agency (Anru), of the French environmental and energy control agency (Ademe), of the Société du Grand Paris (SGP), of the Public company for the development of La Défense-Seine Arche (Epadesa), of the French financing agency for transport infrastructure (AFITF), of the French national agency for water and Aquatic environments (Onema)
	Augustin DE ROMANET	President and Chief Executive Officer of Aéroports de Paris	Director and Vice-President of the Board of TAV Havalimanlari Holding AS (Turkey), of TAV Yatirim Holding A.S, of TAV Tepe Akfen Insaat Ve Isletme AS, Chairman and Director of Média Aéroports de Paris, Board member of Société de distribution aéroportuaire (SDA), Management Board member of Relay@ADP, first Vice-President of the Executive Board and the Board of Directors of Airport council international (ACI) Europe
	Gilles LEBLANC	Regional and interdepartmental director for Île-de-France Infrastructure and Planning	Director of ADP Ports de Paris, GPA (previously AFTRP), EPFIF, Epadesa, Epaorsa, EPA Plaine de France
Ms	Solenne LEPAGE	Director of Transport and Audiovisual investments at the Agence des Participations de l'État	State Representative on the Board of Directors of SNCF-Mobilités, of ADP group and AF-KLM
Mr	Roland PEYLET	Honorary State Councillor	No
Ms	Catherine SUEUR	Inspector General of Finance	No
LOCAL AUTHORITY REPRESENTATIVES FROM AREAS DIRECTLY AFFECTED BY THE COMPANY'S ACTIVITIES			
Ms	Annick LEPETIT	Member of Parliament for Paris, Paris Councillor	President of the "Paris Batignolles Aménagement" planning company
Mr	Gilles CARREZ	Member of Parliament for Val-de-Marne	Vice-President of Greater Paris, responsible for finance
REPRESENTATIVES FROM BUSINESS BACKGROUNDS			
Ms	Michèle BELLON	Former ERDF President, President of RATP's Audit Committee	Member of the Supervisory Board of the Caisse des dépôts et consignations, Board member of the Shanghai Pasteur Institute, member of the RFF Corporate Strategy Board, Board member of Greentech SA (Greentech Energy System)
	Chiara CORAZZA	Managing Director of Paris – Île-de-France Capitale Économique, Managing Director of Women's Forum for the Economy and Society	Independent director of April
	Sylvie FRANÇOIS	Deputy Managing Director of La Poste Group, responsible for Group Human Resources	Member of the Supervisory Board of La Banque Postale

	Name	Role	Other positions
REPRESENTATIVES OF PUBLIC TRANSPORT USERS			
Messrs	Michel BABUT	FNAUT (National federation of transport users)	No
	Stéphane BERNARDELLI	Unaf (National union of family non-profit organisations)	Member of the Board of Directors of Union nationale des associations familiales (Unaf), director appointed by Unaf to the High committee of the railway system, to the High council of road safety education (CSER), to the Consumers and Users Advisory Board of the SNCF, to the High committee on the quality of service in public transport (HCQST) and to the Board of Directors of Caisse nationale des allocations familiales (Cnaf) and Caisse nationale d'assurance maladie des travailleurs salariés (CNAMTS)
TRANSPORT BUSINESS EXPERT			
Messrs	Bruno ANGLES	Chairman of Crédit Suisse France and Belgium	Member of MEIF – Advisory Panel
	Patrice RAULIN	Former Chairman of Société Lyon-Turin Ferroviaire, Chairman of CMTTT	Member of the APRR Procurement Board. Vice-Chairman of the Fédération habitat-humanisme, co-manager of Foncière d'habitat-humanisme, director of Coallia and of Mouvement d'aide au logement
EMPLOYEE REPRESENTATIVES			
Messrs	Abdel Halim LALOUANI	Employee director	Director of Logis-Transports
	Didier LE PAHUN	UNSA union member	Director of Telcité and Naxos
Ms	Laurence DE WILDE-GHIKH	UNSA union member	Director of SEDP and the RATP Foundation
	Karen MARQUEZ	SUD union member	Director of CRP
Messrs	Fabrizio PIRAS	CGT union member	Director of Logis-Transports and the RATP Foundation
	Michel RIZZI	CGT union member – Chairman of CISC	No
	Gilles ROUE	CGT union member	Employee Director of the RATP staff pension fund (CRP), Director of Promo Métro and SEDP
	Gilles SAVERET	CGT union member	No mandate
Ms	Claire JEUNET-MANCY	CFE-CGC union member	Director of Telcité and Naxos, and the RATP mutual insurance fund

Appendix 2 Board meetings and work in 2016

Meetings	Number	Business	Number
Board of Directors			
• 29 January			
• 25 March			
• 27 May			
• 1 July			
• 31 August			
• 7 October			
• 25 November			
Technical and Technological Transport Modernisation Committee			
	7	Discussions	40
		Deliberations	44
		Of which:	
		• Contracts > €60 million	5
		• Preliminary projects	5
	7	• Additional project outlines	0
Economic Strategy Committee	7		
Innovation and Customer Service Committee	7		
Audit Committee	5		
Working groups	3		
Seminar	1		
TOTAL	37		

Appendix 3 RATP accounting policies

1 Preparation of the financial statements

RATP group issues its audited consolidated financial statements and certified parent company financial statements on a yearly basis. It also publishes half-yearly consolidated financial statements, which undergo a limited review by the Statutory Auditors.

RATP issues bonds linked to the EMTN program⁽¹⁰⁾. The update of this program, made every year, is reviewed by the Auditors who issue a comfort letter.

In general, the accounting information produced by RATP parent company fulfils the requirements of its departments and units in terms of budgeting, forecasting and general management.

As of 1 January, 2012, in accordance with the provisions of the French law of 3 June, 2010, infrastructure management and public passenger transport service operations have been accounted for separately, with a balance sheet and income statement prepared for each in the notes to the parent company financial statements. On 1 January, 2012, a structure dedicated to the accounting treatment of infrastructure management operations was set up.

To prepare the separate balance sheets and income statements, the appropriate amounts have been directly allocated to the corresponding line items or flows. Where this is not possible, for instance if the line items or cash flows are managed by one activity and have initially been recognised as such, internal transfers between the two activities have been arranged to bill the activities appropriately, in accordance with general practice. Such agreements govern the scope of the transfers, the valuation principles and the invoicing methods. They are regularly reviewed by both activities.

⁽¹⁰⁾ Euro Medium-Term Notes.

2 Control procedures on the preparation of the parent company financial statements

2.1 ACCOUNTING POLICIES

RATP ensures the segregation of duties of its accountants (employees who generally work for the Finance and Management Control Department), treasurers and the departments authorising expenditure.

The accountants draw on an array of regulatory, management and accounting texts relating to their function.

RATP's accounting system is designed to ensure that controls take place throughout the process of preparing the financial statements.

2.2 REGULAR CONTROLS

1. The department units and support groups are involved in RATP's accounting operations insofar as they authorise and engage company expenditure and revenue and define their cost accounting systems in line with the company's common accounting rules. This may involve delegated accounting tasks (data entries can be made without involving accountants from the company's accounting unit) or direct access to accounting information systems to enter data such as external expenses, using local tools connected to the company's accounting information system.
2. The local accounting offices of the company's accounting unit are responsible for controlling the entries made by the units in management systems on a monthly basis. They make the corrections necessary and record operations not delegated to the units. On 1 January, 2012, an accounting office was set up for infrastructure management operations.
In 2014, a body was created within the accounting unit dedicated to capital expenditure and investment. The purpose of this body, which was formed by merging two accounting offices, is to centralise all issues relating to capital expenditure: the accounting treatment for property, plant, equipment and fixed intangible assets; management of capital expenditure guidelines, and dissemination of capital expenditure rules and methods.
Certain sections of the company have specific accounting delegations. The work initiated in 2012 to set out formal procedures for these authorisations (scope, responsibilities, review process, accounting procedures, etc.) is still underway. In addition to regular monitoring by the accounting offices, periodic reviews must be scheduled by the company's accounting unit in order to control use of IT systems and compliance with applicable agreements and procedures.
Ad hoc audits are also performed by the audit office of the company's accounting unit.
3. All the data are reported to the central departments where summaries are prepared and centralised work is performed, including: booking of payables and receivables, payroll receipts and expenses, control of accounting quality, preparation of the financial statements (including the balance sheet, income statement and notes thereto, etc.).
4. Since 2012, these controls have been reorganised in order to adapt to changes in accounting systems and to the constraints of

- separately accounting for infrastructure management activities and public passenger transport service operations, particularly in terms of access authorisations for accountants from one or other activity.
5. In 2016, the company's accounting unit continued with the project to formalise and strengthen internal control work. This project forms part of an internal control and risk management system deployed throughout the entire company in the CGF Department.

2.3 MONTHLY REPORTING

The accounts are closed every month, at which time the accounting offices ensure that changes in expenses and income are reasonable, and record closing entries. A central accounting unit performs a cross-company analysis of the results.

Responsibility for balance sheet accounts lies with the unit's various offices, which perform reviews and other analytical procedures on a regular basis. These are reviewed by the central accounting unit, which performs a global check.

3 Preparation of the consolidated financial statements of RATP group

The consolidation of the financial statements is performed using consolidation software comprising an application that implements the accounting policies and rules, which are regularly updated. The majority of the entities' consolidation packages are compiled by the subsidiaries' accountants. Much of the control work is carried out using the consolidation system configured to include numerous and occasionally restrictive controls. The software publisher is responsible for maintenance of the tool.

The consolidated financial statements are produced by a section of the company's accounting unit for the whole Group. In support of the management control of subsidiaries, this section ensures that the source information provided by the consolidated entities is consistent. It is responsible for preparing financial information in compliance with International financial reporting standards for the majority of the subsidiaries and making the consolidation adjustments (harmonisation of the financial statements, elimination of inter-company securities and transactions). Changes in shareholders' equity are reviewed for each subsidiary, and then justified globally at the Group level. Reviews of account balances are then made to verify their accuracy.

The information derived from the accounting consolidation is the same as that used by analysts from the Finance and Management Control Department's unit responsible for subsidiaries, financial transactions and tax. As a result, during the closing period, information from subsidiaries is simultaneously analysed and cross-checked against information from previous months and from budgets and forecasts.

Statutory Auditors' report

Statutory Auditors' report on the report of the President of the Board of Directors of RATP on internal control and risk management procedures

Year ended 31 December 2016

In our capacity as Statutory Auditors of RATP and further to your request, we present our report on the report drawn up by the President of your company on internal control and risk management procedures for the period ended 31 December 2016.

It is the responsibility of the President to report on the internal control and risk management procedures implemented within RATP and to provide the other information as required by article L. 621-18-3 of the French Monetary and Financial Code.

It is our duty to impart to you our observations on the disclosures in the President's report concerning internal control and risk management procedures as regards the preparation and treatment of accounting and financial reporting.

We have conducted our audit according to the professional standards applicable in France. These standards require us to exercise due care and diligence in assessing the fairness of disclosures concerning internal control and risk management procedures as regards the preparation and treatment of accounting and financial reporting in the President's report.

In particular, this consists of:

- obtaining an understanding of the internal control and risk management procedures relating to the preparation and treatment of accounting and financial reporting on which the information presented in the President's report is based, and existing documentation;
- understanding the work involved in the preparation of the said disclosures and existing documentation;
- determining whether any major deficiencies we noted in internal control as regards the preparation and treatment of the accounting and financial reporting have been duly disclosed in the President's report.

On the basis of our work in this respect, we have no comment to make on the disclosures in the report of the President of the Board of Directors of RATP on internal control and risk management procedures as regards the preparation and treatment of the accounting and financial reporting.

Issued in Courbevoie on 28 March 2017
The Statutory Auditors

KPMG
Philippe Arnaud

MAZARS
Lionel Gotlib

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Statutory Auditors' report

Statutory Auditors' report on the consolidated financial statements

Year ended 31 December 2016

In compliance with the assignment entrusted to us by the Commissioner of the French Government Shareholding Agency (APE), we hereby report to you, for the year ended 31 December 2016, on:

- the audit of the accompanying consolidated financial statements of RATP;
- the justification of our assessments;
- the specific verifications required by French law.

The Board of Directors is responsible for preparing the consolidated financial statements. It is our duty to express an opinion on these financial statements on the basis of our audit.

1. Opinion on the consolidated financial statements

We have conducted our audit according to the professional standards applicable in France. Those standards require that we plan and perform our work to obtain reasonable assurance that the consolidated financial statements are free from material misstatement. An audit involves checking, using sampling techniques or other methods of selection, to obtain evidence justifying the amounts and information in the consolidated financial statements. It also consists in assessing the accounting policies adopted and evaluating the significant estimates in the financial statements and the overall presentation thereof. We consider that the elements we have collected are appropriate and sufficient for basing our opinion.

In the event of a change in tax status, IAS 12 and paragraph 4 of interpretation SIC 25 explicitly require the recognition of deferred taxes in the income statement. Note 7.2 of the notes to the consolidated financial statements "Deferred taxes" explains why RATP did not follow the interpretation but recorded the tax receivables in equity.

In our opinion, except for the issue mentioned above, the consolidated financial statements give a true and fair view of the assets and liabilities, financial position and earnings of all the reporting entities in accordance with the International Financial Reporting Standards adopted by the European Union.

Without qualifying the opinion expressed above, we draw your attention to Note 7 "Income tax" in the notes to the consolidated financial statements, which describes the accounting consequences of RATP's corporate income tax liability from 1 January 2016.

2. Justification of our assessments

In accordance with the provisions of article L. 823-9 of the French Commercial Code relating to the justification of our assessments, we draw your attention to the following matters:

- Note 1.3 to the consolidated financial statements describes the basis for the preparation of the financial statements and in particular the items for which management exercises judgment or

makes estimates and assumptions that have an impact on the application of accounting policies, on assets and liabilities, and on receivables and payables. This note also specifies that the estimates made at 31 December 2016 were based on assumptions that may be subject to change. Consequently, actual results may differ significantly from those estimates. We have assessed the appropriateness of the adopted arrangements and the disclosures about these judgments, estimates and assumptions, and we have verified the correct implementation of the adopted arrangements;

- Note 15 to the consolidated financial statements on "Asset impairment tests" presents the cash-generating units defined at Group level and the arrangements for the implementation of impairment tests, as well as the main assumptions used to determine recoverable value, the results of the impairment tests and the sensitivity of recoverable values. We have reviewed the methods used to perform these impairment tests, the consistency of the assumptions used and the cash flow forecasts and verified the appropriateness of disclosures thereof;
- Note 24 on "Provisions for employee benefits" describes the post-employment and other long-term benefits provisioned in the balance sheet, as well as the method used to measure these provisions. We reviewed the manner in which these benefits and provisions had been identified, measured and recognised, and we verified the appropriateness of the disclosures thereof;
- as mentioned in the first part of this report, Note 7 "Income tax" in the notes to the consolidated financial statements describes the accounting consequences of RATP becoming liable to corporate income tax from 1 January 2016. Our work entailed verifying that the tax reporting requirements had been correctly applied and presented.

These assessments were part of our audit of the consolidated financial statements as a whole, and therefore contributed to the opinion expressed in the first part of this report.

3. Specific verifications

In accordance with the professional standards applicable in France and as required by law, we have also verified the information presented in the management report of RATP group.

We have no matters to report as to its fair presentation and consistency with the consolidated financial statements.

Paris-La Défense and Courbevoie, 28 March 2017
The Statutory Auditors

KPMG Audit
Department of KPMG SA
Philippe Arnaud
Partner

MAZARS
Lionel Gotlib
Partner



Consolidated statements of comprehensive income

The financial statements are presented in thousands of euros.

1 Income statement

	Notes	31/12/2016	31/12/2015
Revenue (of which revenue from financial concession assets €116 million in 2016 and €158 million in 2015)	3	5,447,767	5,556,355
Other income from ordinary activities	3	341,756	458,717
Revenue	3	5,789,523	6,015,072
Cost of sales		(630,051)	(759,201)
Other purchases and external charges		(875,597)	(875,522)
Tax, duties and other payables	4	(325,353)	(249,916)
Payroll costs	5	(3,144,924)	(3,121,935)
Other operating expenses		(27,655)	(54,427)
EBITDA		785,943	954,070
Depreciation and amortisation		(386,093)	(370,955)
Provisions, net	25	(18,300)	4,717
Gain on disposal of assets		(6,755)	1,233
Gain on other consolidation scope changes	2	(461)	35,330
Impairment		0	(17)
Other operating income (expenses)		230	13
Income from equity-accounted entities	17	7,531	4,617
Operating income after share of net income from equity-accounted entities		382,095	629,008
Financial income	6	53,301	60,241
Financial expenses	6	(229,137)	(233,803)
Net financial expense		(175,836)	(173,562)
Pre-tax income		206,259	455,446
Income tax	7	(28,051)	(9,595)
Consolidated net income		178,208	445,850
Attributable to owners of the company		171,019	437,253
Non-controlling interests		7,190	8,598

2 Other comprehensive income

	31/12/2016	31/12/2015
Consolidated net income	178,208	445,850
Gains and losses on remeasuring available-for-sale financial assets	0	(1,948)
Change in the fair value of cash flow hedges	5,808	13,535
Deferred taxes on changes in the fair value of the effective portion of the cash flow hedge derivative instruments	(171)	443
Foreign currency translation differences	(10,264)	3,766
Share from equity-accounted entities of comprehensive income that may be reclassified to profit or loss	1,013	2,983
Total other comprehensive income that may be reclassified to profit or loss	(3,614)	18,780
Remeasurement of gross defined benefit obligations	(66,284)	83,396
Deferred taxes on remeasurement of defined benefit obligations	409	644
Share from equity-accounted entities of comprehensive income that may not be reclassified to profit or loss	(268)	(48)
Total other comprehensive income that may not be reclassified to profit or loss	(66,143)	83,992
Income and expense recognised under other components of comprehensive income	(69,757)	102,772
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	108,452	548,623
Attributable to owners of the company	100,445	539,175
Non-controlling interests	8,006	9,448

Consolidated balance sheets

Assets	Notes	31/12/2016	31/12/2015	Liabilities	Notes	31/12/2016	31/12/2015
Net goodwill	8	354,631	370,226	Capital endowment	23	433,367	433,367
Intangible assets	9	716,044	608,757	Reserve for assets allocated to RATP	23	250,700	250,700
Property, plant and equipment	10	5,758,891	5,494,467	Reserves		3,449,877	2,553,422
				Retained earnings		171,019	437,253
				Equity attributable to owners of the company		4,304,963	3,674,742
Equity accounted investments	17	139,526	137,005				
Available-for-sale financial assets	18	35,399	39,147	Non-controlling interests		33,039	33,506
Derivative financial instruments – non-current	30	144,107	284,153				
Financial concession assets – non-current	14	3,899,597	3,942,450	Equity		4,338,002	3,708,248
Other financial assets – non-current	19	463,154	518,561				
Deferred tax assets	7	688,511	31,041	Provisions for employee benefits	24	762,098	681,493
				Other provisions – non-current	25	160,424	158,289
Non-current assets		12,199,859	11,425,807	Loans and borrowings – non-current	26	5,402,326	5,394,705
				Derivative financial instruments – non-current	30	52,239	48,652
Inventories	20	208,712	198,210	Deferred tax liabilities	7	179,124	36,362
				Other trade creditors		10,447	586
Operating receivables	21	1,112,351	960,326	Non-current liabilities		6,566,659	6,320,087
Derivative financial instruments – current	30	173,740	88,324				
Financial concession assets – current	14	277,861	272,536	Other provisions – current	25	74,434	61,743
Other financial assets – current	19	439,965	455,869	Loans and borrowings – current	26	2,279,064	2,274,965
				Derivative financial instruments – current	30	6,718	31,288
Cash and cash equivalents	22	1,020,413	1,051,687	Accounts payable	27	2,168,024	2,056,428
Current assets		3,233,042	3,026,952	Current liabilities		4,528,240	4,424,424
TOTAL ASSETS		15,432,901	14,452,759	TOTAL EQUITY AND LIABILITIES		15,432,901	14,452,759

Consolidated statements of cash flows

	Notes	31/12/2016	31/12/2015
Consolidated net income		178,208	445,850
Income from equity-accounted entities		(7,459)	(4,617)
Depreciation and amortisation		423,946	382,931
Depreciation and amortisation of concession assets	14	300,928	297,565
Gains/(losses) from asset disposals		6,224	(76,840)
Other non-cash items		10,034	1,332
Cash flow from operations after net financial expense and tax		911,882	1,046,222
Adjustment of tax expense (income)		28,051	9,595
Change in working capital excluding investments and grants	28	(114,478)	(23,146)
Income taxes paid		(7,465)	(14,556)
Net cash provided by operating activities		817,990	1,018,115
Effect of scope changes		(16,070)	(77,234)
Purchase of property, plant and equipment and intangible assets	9 and 10	(1,240,944)	(1,122,839)
Purchase of concession assets		(610,105)	(777,599)
Purchase of other financial assets		32	(2,392)
Change in loans and advances granted		4,395	(8,736)
Change in working capital relating to investments and concession assets		63,827	(34,746)
Investment grants received excluding concession assets	9 and 10	533,574	507,773
Investment grants received for concession assets		281,684	383,947
Change in investment grants to be received		(4,506)	(141,173)
Proceeds from disposals of property, plant and equipment and intangible assets		15,123	28,090
Proceeds from financial assets		151	1,575
Dividends received from equity-accounted entities		2,111	6,905
Net cash used in investing activities		(970,727)	(1,236,430)
Non-controlling interests – share of changes in capital		(500)	(592)
Proceeds from issuance of borrowings		526,664	597,442
Repayment of borrowings		(189,431)	(601,346)
Change in commercial paper		(292,896)	(109,955)
Change in cash collateral and short-term investments		(9,359)	118,922
Increase/(decrease) in accrued interest		(147)	(9,119)
Dividends paid to non-controlling interests		(4,316)	(9,926)
Other cash flow from financing activities		(7,636)	4,710
Net cash from financing activities		22,380	(9,864)
Effect of changes in the exchange rate		516	(54)
Effect of changes in accounting principles		(10,008)	–
Net change in cash and cash equivalents		(139,850)	(228,233)
Cash and cash equivalents at 1 January		1,001,667	1,229,899
Cash and cash equivalents at 31 December	22	861,817	1,001,667
Net change in cash and cash equivalents		(139,850)	(228,232)



Consolidated statements of changes in equity

	Share capital	Reserve for assets allocated to RATP	Translation reserve	Actuarial gains and losses	Fair value reserve	Cash flow hedges	Other reserves	Equity attributable to owners of the company	Non-controlling interests	Total equity
Equity as at 31 December 2014	433,367	250,700	5,974	(182,342)	1,724	(46,213)	2,674,251	3,137,459	33,194	3,170,653
Net income for the period							437,253	437,253	8,598	445,851
Other comprehensive income			5,894	84,118	(1,948)	13,857		101,921	850	102,772
Total comprehensive income for the period	0	0	5,894	84,118	(1,948)	13,857	437,253	539,175	9,448	548,623
Other transactions with owners of the company							(2,045)	(2,045)	(2,533)	(4,578)
Dividends									(7,398)	(7,398)
Other changes							153	153	795	948
Equity as at 31 December 2015	433,367	250,700	11,868	(98,224)	(224)	(32,356)	3,109,612	3,674,742	33,506	3,708,248
Net income for the period							171,019	171,019	7,190	178,208
Other comprehensive income			(10,395)	(65,853)		5,675		(70,573)	816	(69,757)
Total comprehensive income for the period	0	0	(10,395)	(65,853)	0	5,675	171,019	100,445	8,006	108,452
Other transactions with owners of the company							(7,054)	(7,054)	(3,350)	(10,404)
Dividends								0	(5,114)	(5,114)
Recognition of RATP's deferred taxes							537,000	537,000	0	537,000
Other changes							(169)	(169)	(10)	(179)
EQUITY AS AT 31 DECEMBER 2016	433,367	250,700	1,473	(164,077)	(224)	(26,681)	3,810,407	4,304,963	33,039	4,338,002

HIGHLIGHTS OF THE YEAR

RATP was notified by a letter from the Minister for Finance and Public Accounts dated 3 March 2016 that, as a public institution engaged in gainful activities, it has to pay all taxes and duties to which private undertakings engaged in the same operations would be subject. The result of this letter is that RATP is subject to corporate income tax and similar taxes (apprenticeship tax and tax on company vehicles). RATP also considers that this deadline will lead it to pay payroll tax from the fiscal year beginning on 1 January 2016.

The impacts of this tax liability are described in Note 7.

The accounting treatment of RATP's deferred tax assets is explained in Note 7.

Notes to the consolidated financial statements

Unless otherwise stated, all amounts are presented in thousands of euros.

RATP group (“the Group”) is a major public transport provider in France, operating in towns and suburbs and particularly in the Île-de-France area.

The parent company, Régie autonome des transports parisiens (RATP), is a state-owned industrial and Commercial public utility (Epic) created by the law of 21 March, 1948. It is a legal entity under public law, registered with the Paris Trade and Companies Register. Its head office is located at 54, quai de la Râpée, 75012 Paris.

The aim of RATP is primarily to run a public transport service in Île-de-France and its purpose, fixed by French law No. 2009-1503 dated 8 December, 2009 on public passenger services by rail (ORTF law), is to manage the network infrastructure for public passenger transport services. This law:

- entrusted RATP with the role of managing the metro and RER network infrastructure (excluding the responsibilities conferred on SNCF Réseau) used for its operations as of 1 January, 2010;
- specified that lines created before 3 December, 2009 shall continue to be operated under the terms of the agreements effective as at that date and the agreements that shall be negotiated under the defined legal framework until 31 December, 2024 for bus services, until 31 December, 2029 for tramway services and until 31 December, 2039 for other transport services (metro and RER). The operating rights granted to RATP are thus limited in duration, with renewal possible under the terms stipulated by law;
- set forth the framework governing the remuneration of RATP for managing the infrastructure and operating the services, ensuring an appropriate return on capital employed.

The Île-de-France transport offer is defined by the Île-de-France transport authority (STIF). RATP’s activity as operator is governed by multi-year agreements with the Île-de-France transport authority. As part of these agreements, RATP undertakes to provide a benchmark transport service defined in terms of quantity and quality, and receives compensation based on the direct revenue and flat-rate contributions paid by the Île-de-France transport authority.

Since the adoption of French law No. 2000-1208 on Solidarity and Urban Renewal, RATP has been authorised to operate public transport networks *via* its subsidiaries throughout France and abroad.

RATP is a State-owned company and, as such, the Group’s consolidated financial statements are included in the combined financial statements of the latter.

The Group’s consolidated financial statements as at 31 December 2016 were approved by the Board of Directors on 24 March 2017.

1 Accounting guidelines

1.1 ACCOUNTING POLICIES

Pursuant to European regulation No. 1606/2002 of 19 July, 2002 on international standards, the consolidated financial statements of the Group have been prepared as at 31 December 2016 in accordance with the International financial reporting standards (IFRS) as adopted by the European Union.

Information on these standards is available on the European Commission website at: http://ec.europa.eu/finance/company-reporting/ifrs-financial-statements/index_en.htm.

1.2 IFRS DEVELOPMENTS AND ACCOUNTING CHANGES

1.2.1 STANDARDS, AMENDMENTS AND INTERPRETATIONS MANDATORY FOR FINANCIAL YEARS BEGINNING ON OR AFTER 1 JANUARY 2016

The new IFRS texts that are mandatory in the European Union from 1 January 2016 are amendments to existing standards. These amendments have no impact on the consolidated financial statements as at 31 December 2016.

1.2.2 STANDARDS, AMENDMENTS AND INTERPRETATIONS ADOPTED BY THE EUROPEAN UNION THAT ARE NOT MANDATORY FOR 2016 CONSOLIDATED FINANCIAL STATEMENTS

The Group has not opted for early application of the following standards adopted by the European Union:

- IFRS 15 “Revenue from contracts with customers” will be effective for accounting periods beginning on or after 1 January 2018. This standard will replace IAS 18 “Revenue” and IAS 11 “Construction contracts” by introducing a new model for recognising revenue. The impacts of this standard are currently being analysed. At this stage, the Group does not expect any significant impact;
- IFRS 9 “Financial instruments” will be effective for accounting periods beginning on or after 1 January 2018. This standard primarily introduces changes in the way financial instruments are classified and measured and also how hedges are recognised. The impacts of this standard are currently being analysed. At this stage, the Group does not expect any significant impact.

The Group has not opted for early application of the other standards, amendments and interpretations adopted by the European Commission which are effective for financial years beginning on or after 31 December 2016. The Group does not expect any significant impact on its financial statements.

1.2.3 STANDARDS, AMENDMENTS AND INTERPRETATIONS PUBLISHED BY THE IASB BUT NOT YET ADOPTED BY THE EUROPEAN UNION

The new standards published by the IASB but not yet adopted by the European Union mainly concern the standard IFRS 16 “Leases”, which will be effective from January 1, 2019 and will replace IAS 17. This standard will result in recognising lease rights and obligations as assets and liabilities, without distinguishing between operating leases and finance leases. The impacts of this standard are currently being analysed.

The Group does not plan to apply this new standard early.

1.3 USE OF ESTIMATES AND ASSUMPTIONS

The preparation of the consolidated financial statements requires Group management to make estimates and assumptions, as many of the items included in the financial statements cannot be measured accurately. Management revises the estimates if there is a change in the circumstances upon which they were based, or when new facts arise or it obtains a more extensive understanding of the situation. Consequently, actual results may differ significantly from the estimates made at 31 December 2016.

The estimates and assumptions notably concern:

- the accumulated amortisation, depreciation and impairment of assets, particularly property, plant and equipment (Note 10), inventories (Note 20), operating receivables (Note 21), goodwill (Note 8) and asset impairment tests (Note 15);
- liabilities, including provisions for contingencies, primarily those for decommissioning (Note 25), and items relating to employee benefits (Note 24) and contingent liabilities (Note 34);
- fair value measurement of financial instruments (Note 31);
- assessment of counterparty risk on deposits connected with leasehold agreements (Note 13);
- recognition of deferred tax assets (Note 7);
- recognition of concessions operated by RATP and the subsidiaries (Note 14);
- business combinations (Note 2).

The accounting principles applied when preparing the consolidated financial statements are set out below in the notes to the consolidated financial statements. Unless otherwise indicated, these methods were consistently applied to the reporting periods presented.

1.4 CONSOLIDATED STATEMENT OF INCOME SUBTOTALS

RATP group has chosen to present its consolidated statement of income by nature of expense. A number of subtotals are used to assist users of the financial statements in understanding the components of net income.

1.4.1 EBITDA (EARNINGS BEFORE INTEREST, INCOME TAX, DEPRECIATION AND AMORTISATION)

EBITDA comprises revenue and other income from ordinary activities less directly attributable operating expenses. These mainly include cost of sales, subcontract expense, other purchases and external

charges, payroll and payroll-related costs and taxes (other than income tax). All payroll-related amortisation and provisions, in particular those concerning employee benefits are included in the line item “payroll costs”.

1.4.2 OPERATING INCOME AFTER SHARE OF NET INCOME FROM EQUITY-ACCOUNTED ENTITIES

In addition to the components included in EBITDA, operating income includes most non-cash items (depreciation and amortisation, movements in provisions) and other operating income and expense, as well as income from equity-accounted entities.

Operations that are uncommon both in their occurrence and amount are isolated in other operating income and expenses. Non-recurring and extraordinary items are shown separately in order to present the fairest view of the Group’s recurring operating results.

1.4.3 INCOME STATEMENT

Under financial income and expense, the Group presents the consequences of its financing transactions, which principally reflect the cost of its net debt. Net financial expense mainly corresponds to the cost of net debt. This comprises interest expense on loans and borrowings, interest income on cash and cash equivalents and income or expense from leasehold operations. These items are shown net of the effect of hedging operations, including changes in the fair value of derivative financial instruments, that do not meet IFRS hedge accounting criteria.

1.5 OWNERSHIP REGIME GOVERNING ASSETS CAPITALISED BY RATP

The ownership regimes governing assets created by RATP or originally allocated to RATP are distinguished into four asset categories:

- infrastructure assets, which are managed and owned by RATP;
- rolling stock and the related maintenance equipment (returnable assets), which are owned by the Île-de-France transport authority. It will have full possession of these assets upon the expiry of RATP’s operating rights, when it repurchases the assets at their carrying amount net of grants, as reported in RATP’s (annual) financial statements. In the consolidated financial statements, these assets are recognised as financial assets in accordance with IFRIC 12 – “Service concession arrangements” (Note 14);
- other assets required for operations (reversionary assets), other than those mentioned in the previous two paragraphs, which are fully owned by RATP. Upon expiry of RATP’s operating rights, the Île-de-France transport authority has the right to repossess these assets. These assets were recognised as financial assets and intangible assets in accordance with IFRIC 12 – “Service Concession Arrangements” (Note 14);
- real property and other assets that are not allocated to operations but are used by RATP for administrative, social or training purposes, which are fully owned by RATP.

Assets capitalised by RATP are recognised as follows:

Type of assets

	Infrastructure management	Transport operations activity		
	Fully-owned assets	Returnable assets	Reversionary assets	Fully-owned assets
Nature of assets	Infrastructure assets.	Rolling stock and related maintenance equipment.	Assets required for operations: <ul style="list-style-type: none"> • bus stations; • equipment, etc. 	Assets allocated for administrative, social and training purposes.
Ownership regime	RATP owns these assets.	These assets belong to the Île-de-France transport authority. RATP uses and manages the assets. The Île-de-France transport authority will take possession of the assets when the operating rights expire.	RATP owns these assets. The Île-de-France transport authority holds a right to repossess these assets subject to payment of compensation to RATP upon expiry of the agreement.	RATP owns these assets.
Compensation arrangements during operating period	The compensation for Infrastructure management is collected <i>via</i> Transport operations.	Article 14 of French decree No. 2011-320 sets forth the arrangements governing the compensation payable by the Île-de-France transport authority to RATP for the assets.	The compensation principles and arrangements apply for the duration of the Île-de-France transport authority agreement 2016-2020.	
Compensation arrangements upon expiry of operating rights	NA	Article 14 of the French decree No. 2011-320 provides for the buyback of the assets at their carrying amount, net of any grants.	The STIF-RATP agreement provides for the repossession of the assets at a value of zero for assets transferred to RATP, or at their carrying amount, net of grants for other assets.	NA
Assets eligible under IFRIC 12 – “Service Concession Arrangements”	No	Yes ⁽¹⁾	Yes ⁽¹⁾	No

(1) Assets eligible under IFRIC 12 were recognised as financial concession assets and/or intangible assets (Note 14).

2 Scope of consolidation

2.1 ACCOUNTING PRINCIPLES RELATED TO THE SCOPE OF CONSOLIDATION

2.1.1 PRINCIPLES OF CONSOLIDATION

2.1.1.1 Determination of the scope and methods of consolidation

RATP group’s consolidated financial statements comprise the financial statements of the RATP parent company and those of its subsidiaries, joint ventures, joint operations and associates.

The Group includes controlled subsidiaries. This control is presumed to exist when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Companies are consolidated from the date their controlling interest is transferred to the Group. They are deconsolidated from the date the Group ceases to exercise such control. When the Group ceases to control a subsidiary, it derecognises the assets and liabilities, as well as any non-controlling interests and other recyclable equity components, where applicable. The resulting profit or loss is recognised in the

income statement. Any retained interest should be measured at the fair value on the date control ceases. Changes in ownership interest in a subsidiary that do not result in a loss of control are recognised in equity. Transactions between consolidated entities are eliminated.

Entities that are jointly controlled by the Group and other shareholders and classified as joint ventures are accounted for by the equity method. Joint ventures are joint arrangements in which the partners have rights to the net assets of the jointly-controlled entity. Joint arrangements classified as joint operations are accounted for line-by-line for the amounts of retained interest in assets, liabilities, income and expenses for the Group. These are joint arrangements in which the partners have direct rights to the assets and direct obligations due to the liabilities of the jointly-controlled entity. The Group particularly retains in its assessment the fact that the entity’s income is mainly destined for joint arrangements, as well as the share of the entity’s financing by partners compared to external financing. Only the Metrolab partnership (research and development activity) is classified as a joint operation. The other joint arrangements are classified as joint ventures.

Entities over which the Group exercises significant influence are accounted for using the equity method; significant influence is presumed to exist when the Group holds 20% or more of voting rights.

The equity-accounted investments will be subject to an impairment test if an indication of impairment appears.

Adjustments are made to the financial statements of consolidated and equity-accounted entities to bring them into compliance with the accounting policies applied by the Group.

Low-cost housing company HLM Logis-Transports

Assessing the extent of control over low-cost housing (HLM) companies takes into account the atypical nature of these companies, their specific operational characteristics and the very strict regulatory constraints imposed upon them.

Consequently, despite the fact that RATP holds close to a 100% stake, the company was not consolidated because the Group deems it does not have control, pursuant to IFRS 10, for the following reasons:

- low-cost housing regulations impose financial and statutory constraints (e.g. restrictions on distributable profit and liquidating dividend rights), which limit the rights to variable returns to which RATP may be entitled;
- the debt of low-cost housing companies, transaction by transaction, is almost always guaranteed by the local government authorities. Consequently, RATP does not bear any repayment risk on the loans granted to HLM Logis-Transports;
- although RATP exercises influence over certain aspects of HLM Logis-Transports' management, its influence cannot be qualified as control. RATP cannot manage the relevant activities of Logis-Transports despite its majority share. The assets of Logis-Transports are land and buildings used for social housing. The sale of these assets is restricted (impossible outside the low-cost housing market). They are a source of revenue (rent), which is set and adjusted by the regulator. The use of the assets is subject to certain conditions, such as the quotas for reserving housing set by the prefectures and local authorities. The allocation of housing to RATP employees is carried out by an allocation board in the same way as for external applicants.

The shares of Logis-Transports are classified as available-for-sale financial assets and are measured at their acquisition cost, less impairment losses, where applicable.

The main financial information concerning HLM Logis-Transports SA is presented in Note 18.

2.1.1.2 Business combinations

Business combinations are accounted for using the acquisition method, which requires that identifiable assets acquired and liabilities assumed are measured at fair value at the acquisition date, which is the date at which control is transferred to the Group.

Goodwill resulting from business combinations is measured as the excess of (i) the fair value of the consideration transferred, the recognised amount of any non-controlling interests in the acquiree and the fair value of any pre-existing equity interest in the acquiree and (ii) the net fair value of the identifiable assets acquired and liabilities assumed at the acquisition date.

This goodwill is measured in the functional currency of the acquiree and accounted for on the consolidated balance sheet. The Group may elect at the acquisition date of each business combination to measure any non-controlling interest (minority interest) at fair value (the "full goodwill method") or at its proportionate interest in the recognised amount of the identifiable net assets of the acquiree. The latter method is more frequently applied by the Group.

Transaction costs in connection with a business combination are expensed as incurred.

2.1.1.3 Commitments to purchase non-controlling interests

Financial liabilities include the puts issued by the Group on non-controlling interests.

The Group has adopted the following accounting treatment for these commitments:

- at inception of the puts, the present value of the exercise price is recognised as a financial liability offset through a reduction in non-controlling interests, with the remaining balance recognised in equity attributable to owners of the company;
- at each reporting date, the financial liability is remeasured and changes in the liability are recognised in equity attributable to owners of the company.

Puts with variable exercise prices are measured at the reporting date on the basis of estimates and the most recent data available (*i.e.* exercise price based on fair value or using a formula).

2.1.2 CONVERSION METHOD

2.1.2.1 Functional currency and reporting currency

The consolidated financial statements are presented in euros, which is the Group's reporting currency. The items included in the financial statements of each Group entity are measured in the functional currency, which is the legal tender of the primary economic environment in which the entity operates (the "functional currency").

2.1.2.2 Financial statements of foreign operations

Subsidiaries' financial statements prepared using a functional currency different to the Group's reporting currency have been converted into euros as follows:

- balance sheet entries, using the exchange rate effective at the reporting date;
- income statement entries, using the average exchange rate over the period.

Gains and losses from foreign currency translation are recognised directly as other comprehensive income under "Currency translation reserves" for those relating to the Group, and under "Non-controlling interests" for those relating to non-controlling interests. When a foreign operation is sold, the associated currency translation gains and losses recognised under other comprehensive income are transferred to profit and loss.

2.1.2.3 Conversion of foreign currency transactions

Foreign currency transactions are converted into the functional currency at the exchange rate effective on the date of the transaction.

At each reporting date, monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate effective at this time. Foreign currency translation adjustments are recorded in the income statement for the period or as a separate component under other comprehensive income if they relate to net foreign investments or cash flow hedges.

2.2 CHANGES IN THE SCOPE OF CONSOLIDATION

The list of consolidated companies is provided in Note 38.

2.2.1 ACQUISITION OF THE FINAND GROUP

In September 2016, RATP group acquired 100% of the Finand group, which is based in the Hauts-de-France region, specialised in inter-urban and school transportation services. The Finand group comprises the entities Autocars Finand Parmentier, Cars Charlot, Autocars Finand, CSR, Finand Transport, Escapade and Chemin de Fer du Cambrésis, with the latter already partially owned by RATP Dev. The Group mainly operates regular interurban and school lines on behalf of local General Councils and also offers tourist excursions. It has 131 employees, 134 vehicles and 3 sites in the region.

The Finand group has been fully consolidated since 1 September 2016. The acquisition price of €10.7 million was paid in cash. The provisional goodwill stemming from the transaction amounts to €7.5 million. The final appropriation will be carried out in 2017. Since their first consolidation, the purchased businesses have contributed €4.6 million to Group revenue in four months of business activity.

2.2.2 OTHER CHANGES IN CONSOLIDATION SCOPE

RATP group acquired 100% of Navocap in July 2016. This entity is a supplier of Operating support systems and traveler information. The provisional goodwill amounts to €3.0 million.

The other changes in consolidation scope that occurred during the year had no material impact on the consolidated financial statements.

2.3 GAIN/(LOSS) ON OTHER CONSOLIDATION SCOPE CHANGES

	31/12/2016	31/12/2015
Gain/(loss) on other consolidation scope changes	(461)	35,330

Consolidation scope changes had no material impact on income for 2016.

In 2015, the line item "Gain on other consolidation scope changes" mainly included the gain of €41,005 thousand relating to the remeasurement of pre-existing equity interests in SLT and SELT at fair value as part of the Open Tour takeover operation.

3 Revenue recognition

Revenue is recognised when the major risks and rewards are transferred to the buyer, which usually coincides with the transfer of ownership or the provision of a service. Revenue is recognised net of rebates, discounts and sales tax, and after the elimination of inter-company sales.

Revenue related to the transport business is recognised when the service is carried out.

3.1 RATP'S REVENUE

It comprises:

1. Transport revenue, comprising the following:

- direct traffic revenue from transport users;
- Île-de-France transport authority contributions:
 - Contributions for 2016-2020 include:
 - "C1", a contribution to operating expenses arising from public service obligations. This contribution comprises three items:
 - "C11", a flat-rate contribution to operating expenses from the transport operations activity and infrastructure management that are not covered by revenue from transport users,
 - "C12", a contribution covering the exact amount of business, professional and property-related taxes and duties levied,
 - and "C13", a contribution covering the difference between the direct revenue forecasts used to calculate the "C11" flat-rate contribution and the updated direct revenue forecasts based on the Île-de-France transport authority's pricing decisions,
 - "C2", a contribution to finance investments. In accordance with IFRIC 12 on "Service Concession Arrangements", the portion of "C2" contribution to returnable and reversionary (concession) assets has been accounted for as amortisation and compensation of the associated financial assets recognised (Note 14);
 - a reward or penalty for quality of service;
 - a performance-based bonus scheme with risks and gains shared between RATP and the Île-de-France transport authority based on the actual direct revenue generated compared with contractual revenue targets;
 - "C4", a contribution to finance the acquisition of rolling stock for the T3, T5, T6, T7 and T8 tramway lines (reimbursing actual finance lease payments due). In accordance with IFRIC 12 on "Service Concession Arrangements", the "C4" contribution has been accounted for as amortisation and compensation of the associated financial assets recognised (Note 14).

This transport revenue is provided for under the terms of the 2016-2020 multi-annual agreement concluded between the Île-de-France transport authority and RATP. The "C11" and "C2" contributions are revalued every year by applying an indexing formula based on the indexes, pursuant to the provisions of the Île-de-France transport authority agreement.

Public prices are set by the Île-de-France transport authority, the organising authority. They constitute a public service obligation with which RATP must comply.

2. Transport-related activities

They mainly include:

- revenue from advertising and commercial leases;
- various repayments (including training costs).

3. Non-transport revenue

Non-transport revenue consists primarily of revenue from services and work rendered to third parties, sales of goods, mobile telephony and telecommunications. Revenue from engineering and construction contracts and the associated costs are recognised under income and expense respectively, according to percentage completion at the reporting date. Percentage-of-completion is measured on the basis of the costs incurred for the work performed to date, based on estimated total contract costs.

Profit generated on contracts that are accounted for by the percentage-of-completion method is only recognised when it can be measured reliably. If it is likely that the total costs of the contract will exceed contract income, the expected loss at completion is immediately expensed and recorded as an impairment of contract revenue receivable, then provisioned under liabilities, as appropriate.

3.2 REVENUE FROM SUBSIDIARIES

It is mainly made up of transport revenue, comprising the following:

- direct traffic revenue from transport users;
- pricing contributions made by the transport authorities.

3.3 REVENUE

	31/12/2016	31/12/2015
Transport	4,610,782	4,673,505
Transport-related activities	148,923	150,488
Non-transport revenue	572,117	574,034
Revenue from financial concession assets	115,946	158,327
Revenue	5,447,767	5,556,355
Proceeds from disposal of concession assets	252,596	368,398
Other	89,160	90,319
Other income from ordinary activities	341,756	458,717
REVENUE	5,789,523	6,015,072

Revenue of the main subsidiaries in France and abroad:

	31/12/2016			31/12/2015		
	Revenue	Revenue France	Revenue international	Revenue	Revenue France	Revenue international
RATP	4,321,982	4,321,982		4,413,413	4,413,413	
RATP Dev France/ Switzerland	381,034	369,801	11,233	351,601	340,235	11,366
RATP Dev Italy	20,341		20,341	19,915		19,915
RATP Dev British Isles	389,818		389,818	442,619		442,619
RATP Dev USA	131,825		131,825	124,120		124,120
RATP Dev Africa	134,175		134,175	137,673		137,673
Other	68,593	32,138	36,455	67,015	28,751	38,264
TOTAL	5,447,767	4,723,920	723,846	5,556,355	4,782,399	773,955

4 Tax, duties and other payables

	31/12/2016	31/12/2015
Tax, duties and other payables	(325,353)	(249,916)

This item includes €172 million in taxes and duties on compensation and €89 million for the regional levy (*contribution économique territoriale*). The change in the item is mainly due to the impact of the corporate tax liability as described in Note 7, in particular with respect to ancillary taxes.

5 Payroll costs

5.1 FINANCIAL IMPACT

	31/12/2016	31/12/2015
Compensation	(2,172,899)	(2,173,158)
Payroll taxes	(922,421)	(873,134)
Other long-term employee benefits	(6,927)	26,689
Post-employment benefits	(55,693)	(50,565)
Employee profit sharing	(51,390)	(58,051)
French tax credit on payroll costs (CICE)	64,406	6,284
TOTAL PAYROLL AND PAYROLL-RELATED COSTS	(3,144,924)	(3,121,935)

5.2 NUMBER OF EMPLOYEES

	31/12/2016	31/12/2015
RATP Epic	43,981	43,500
RATP Dev and subsidiaries	16,203	16,002
Other subsidiaries	251	165
AVERAGE NUMBER OF EMPLOYEES	60,435	59,667

These figures relate to employees of fully-consolidated companies, as the employees of equity-accounted entities have not been taken into account.

5.3 DEFINED EMPLOYEE BENEFIT CONTRIBUTION PLANS

The organisation of RATP's pension funding scheme ensues from the application of the following decrees:

- decree No. 2005-1635 of 26 December, 2005 regarding the RATP pension fund (CRP-RATP);
- decree No. 2005-1636 of 26 December, 2005 regarding the financial agreements made under the special pension scheme for RATP employees, as well as the base and contribution rates to the scheme. The decree amends decree No. 59-157 of 7 January, 1959 on passenger transport services in the Île-de-France region;
- decree No. 2005-1637 of 26 December, 2005 regarding RATP pension fund resources;
- decree No. 2005-1638 of 26 December, 2005 setting the rates of contributions to the RATP pension fund.

These decrees state that the CRP-RATP (RATP pension fund), a State entity, assumes the liability for the payment of retirement pensions.

RATP's obligation is to pay contributions, which are calculated in a specific manner, but are equal to the amounts payable by all companies with employees under statutory social protection schemes (compulsory pension schemes such as the French national pension fund – Caisse nationale d'assurance vieillesse, and the complementary pension fund for managers/employees – Association générale des institutions de retraite des cadres/Association pour le régime de retraite complémentaire des salariés AGIRC-ARRCO). The European Commission authorised this scheme on 13 July, 2009 by a decision addressed to the French authorities.

RATP pays employer contributions into the CRP-RATP employees' pension fund. Pursuant to the decrees of December 2005, these contributions are the only requirement incumbent upon RATP in terms of retirement obligations. RATP has no other actuarial liabilities. The payments made by RATP are expensed in the period they relate to.

Retirement expense for 2016 amounted to €282,614 thousand. It is included in payroll costs as part of operating income.

6 Net financial expense

Finance costs

	31/12/2016	31/12/2015
Interest expense on financing	(183,319)	(177,904)
Change in amortised cost	996	(13,637)
Net foreign exchange gain (loss) on borrowings	(52,466)	(58,720)
Net income from fair value transactions on options	(172)	3,401
Net change in fair value of cash flow hedges transferred to profit or loss	(3,348)	(3,484)
Interest expense on hedging and trading derivatives	2,763	(872)
Net income from transactions that do not qualify for hedge accounting	(1,008)	1,050
Net foreign exchange gain (loss) on derivatives	52,466	58,720
TOTAL FINANCE COSTS	(184,088)	(191,446)

Other financial income and expense

	31/12/2016	31/12/2015
Income from investments	653	1,002
Income from cash and cash equivalents	3,275	10,346
Net income from leasehold property	734	1,915
Net foreign exchange gain (loss) on operating items	5,137	(469)
Other financial income and expense	(1,546)	5,090
Total financial income	53,301	60,241
Total financial expense	(229,136)	(233,803)
NET FINANCIAL EXPENSE	(175,835)	(173,562)

Net foreign exchange gains and losses are offset by gains and losses on hedging derivatives. Financial risk management is further described in Note 29.

7 Income tax

Income taxes include current tax expense or income and deferred tax expense or income.

LIABILITY FOR CORPORATE INCOME TAX STARTING 2016

RATP was notified by a letter from the Minister for Finance and Public Accounts dated 3 March 2016 that, as a public institution engaged in gainful activities, under common law it has to pay all taxes and duties to which private undertakings engaged in the same operations would be subject. The result of this letter is that RATP is subject to corporate income tax and similar taxes (apprenticeship tax and tax on company vehicles). RATP also considers that this deadline will lead it to pay payroll tax from the fiscal year beginning on 1 January 2016.

In October 2016, the French tax authorities (DLF) specified the terms of taxation, in particular regarding the opening tax balance sheet and the depreciation rules for fixed assets.

Prior to the entry into taxation on 1 January 2016, RATP revalued on a tax-free basis the assets and liabilities forming the balance sheet at 31 December 2015 at their market value. This corresponds to the tax value of the assets in the opening balance sheet. The "tax" revaluation surplus resulting from the difference between the reassessed value and the carrying amount of the assets appearing in the opening balance sheet is monitored on a non-accounting basis. It generates a tax depreciation thus used solely for the calculation of tax.

In the case of equipment grants granted to undertakings by the European Union, the State, public authorities or any other public body and allocated to the creation or acquisition of fixed assets, article 42-f of the French General Tax Code provides that these subsidies may be taxed as depreciation for the portion of the subsidy allocated to depreciable fixed assets and over a period of ten years for the portion of the subsidy allocated to non-depreciable fixed assets. As RATP was not subject to corporate income tax at the time of granting subsidies awarded before 1 January 2016, it was not in a position to opt for the optional scheme under article 42-f of the French General Tax Code. As a result, the DLF (French tax authorities) consider that the subsidies awarded to RATP before 1 January 2016 relate to pre-tax years and are therefore not taxable.

TAX CONSOLIDATION

In 2016, RATP opted for the tax consolidation regime for the French subsidiaries in which it had more than a 95% stake, as stipulated in article 223A of the French General Tax Code.

Most of the French subsidiaries are in the company's tax consolidation scope. Under the tax consolidation agreements, the subsidiaries bear a tax expense equivalent to that which they would have incurred in the absence of consolidation. The tax consolidation proceeds are acquired by RATP. In accordance with the tax consolidation agreements signed with companies which were previously the parent company of a tax consolidation, for the year 2016, this income

is partially returned to the consolidated company in such a way that the change in the scope of tax consolidation is neutral for the parent companies of a tax consolidation before 2016.

AMENDMENT IN THE PROCESS OF FINALISATION

RATP's accounts have been drawn up taking into account an amendment to the STIF 2016-2020 contract which is currently being formalised, and which provides for adjustments to the differences related to the transition to corporate tax between the assumptions made in the financial terms of the contract and the application methods recommended by the General Directorate of Public Finance.

7.1 INCOME TAX EXPENSE

	31/12/2016	31/12/2015
Current tax expense/income	(18,355)	(16,935)
Tax consolidation expense/income	10,833	3,496
Deferred tax expense/income	(20,529)	3,844
TOTAL INCOME TAX EXPENSE/ INCOME	(28,051)	(9,595)

7.2 DEFERRED TAXES

The Group records deferred taxes for all temporary differences between the carrying amount and taxable value of its assets and liabilities recognised in the consolidated financial statements, using the liability method. Deferred taxes are not recognised if the difference is generated by the initial recognition of an asset or liability in a transaction which is not a business combination, and which does not impact earnings, tax income or tax loss at the transaction date.

Deferred tax according to the liability method is measured using the tax rates that are expected to apply in the reporting period when the asset is realised or the liability settled, based on the tax rates (and tax regulations) enacted or substantially enacted at the reporting date.

Deferred tax assets on temporary differences or carry-forwards are recognised insofar as it is probable that the temporary difference will be attributed to the realisation of a future taxable profit.

Deferred taxes are recognised for all temporary differences arising from investments in subsidiaries, affiliates and jointly-controlled entities, unless the date at which the temporary difference will reverse can be controlled by the Group and the reversal is not expected to occur in the foreseeable future.

Deferred tax is calculated using each country's tax rate. For the Group tax proof, the theoretical tax rate at the date of the financial statements was 34.43%.

Taking into account the intrinsic characteristics of the French value-added business tax (CVAE), especially the capping system, the Group recognises this expense in operating income.

Changes in net deferred taxes are as follows:

	Deferred tax assets – gross	Non-recognised deferred tax assets	Deferred tax assets	Deferred tax liabilities	Net deferred taxes
As at January 1 2016	55,278	(24,237)	31,041	(36,362)	(5,321)
Recognition of RATP's deferred taxes at the beginning of the year	4,840,938	(4,184,659)	656,279	(119,279)	537,000
Tax recognised in the income statement	(53,749)	57,031	3,282	(23,811)	(20,529)
Tax recognised directly under other comprehensive income	20,120	(21,106)	(986)	0	(986)
Change in scope	109	0	109	(1,244)	(1,135)
Foreign currency translation differences	(697)	(51)	(748)	1,331	583
Other	(387)	(79)	(466)	241	(225)
AS AT 31 DECEMBER 2016	4,861,612	(4,173,101)	688,511	(179,124)	509,387

Deferred tax by nature is as follows:

	31/12/2016	31/12/2015
Deferred tax assets – income	146,132	23,864
Deferred tax assets – reserves	542,379	7,177
Total deferred tax assets	688,511	31,041
Deferred tax liabilities – income	176,753	33,546
Deferred tax liabilities – reserves	2,371	2,816
Total deferred tax liabilities	179,124	36,362
NET DEFERRED TAXES	509,387	(5,321)
Of which:		
• Temporary accounting/tax differences	4,365,842	(1,691)
• Revaluation surplus	(7,085)	(8,127)
• Leases	(995)	(2,359)
• Employee benefits	213,975	7,310
• Hedging instruments	11,606	669
• Tax-driven provisions	(29,896)	(5,352)
• Tax loss carryforwards	3,224	4,316
• Impairment on deferred tax assets	(4,047,036)	(181)
• Other	(249)	93

As at 31 December 2016, the temporary differences of RATP resulting from the differences between:

- the carrying amount of the assets and their values in the opening balance sheet at 1 January 2016;
- the tax depreciation periods and the accounting depreciation periods;
- the tax and accounting treatment of the grants existing at January 1 2016,
- generate deferred tax assets over several decades.

As at 1 January 2016 and in accordance with IAS 12, for assessing this tax receivable, RATP group assessed the recoverability of these

deferred tax assets over a reasonable period of time, taking into account expected changes in the tax rate. A €537 million deferred tax asset receivable by equity was recognised.

The accounting treatment of this receivable, by equity, does not comply with the provisions of IAS 12 and the SIC 25 interpretation. However, it makes it easier to read the income statement for the financial year.

This receivable was partially reversed in 2016, based on its use, by the entry of a deferred tax expense amounting to €22 million.

7.3 TAX PROOF

	31/12/2016	31/12/2015
Net income	178,208	496,170
(-) Equity-accounted entities	7,531	4,617
(-) Income tax	(28,051)	(9,595)
Pre-tax consolidated income	198,728	501,149
Statutory tax rate in France	34.43%	34.43%
Theoretical tax expense	68,422	172,546
Effect of tax rates in foreign jurisdictions	882	7,090
Effect of RATP non-taxable status (EPIC)	0	144,435
Other permanent differences	(27,708)	13,014
Effect of tax rate differences	(239)	645
Effect of tax consolidation	10,833	3,496
Other current tax items	1,027	(1,545)
Recognition of tax effect of previously unrecognised tax losses and deferred taxes	157,547	2,354
Current-year losses for which no deferred tax asset is recognised	(101,971)	(6,538)
Total tax expense	28,051	9,595
Effective tax rate	14.12%	1.91%

8 Goodwill

Goodwill is initially recognised in case of a business combination as described in Note 2.1.1.2.

Subsequent to initial measurement, goodwill is stated at cost less any impairment losses. Goodwill is not amortised but is tested for impairment at least once a year and when there is an indication of impairment.

In the event of loss of control over an associate, the gains or losses recognised take into account the carrying amount of goodwill allocated to the divested business.

Changes in goodwill per cash-generating unit were as follows:

	31/12/2014	Change in scope	Effects of exchange rate	Impairment	Reclassification	Other	31/12/2015
France	71,604	11,104	–	(3,207)	–	(644)	78,857
Great Britain	163,205	–	6,304	–	(60,158)	–	109,350
Sightseeing	–	100,981	3,409	–	60,158	(4,257)	160,290
Other	19,711	–	2,017	–	–	–	21,728
TOTAL	254,520	112,085	11,729	(3,207)	–	(4,901)	370,226

	31/12/2015	Change in scope	Effects of exchange rate	Impairment	Reclassification	Other	31/12/2016
France	78,857	10,525	–	–	–	(1,758)	87,624
Great Britain	109,350	–	(15,607)	–	–	–	93,743
Sightseeing	160,290	–	(8,465)	–	–	(729)	151,096
Other	21,728	–	439	–	–	–	22,167
TOTAL	370,226	10,525	(23,633)	–	–	(2,487)	354,631

The column “Change in scope” corresponds mainly to the provisional goodwill of the Finand group for €7.5 million and Navocap for €3.0 million (see Note 2.2).

9 Intangible assets

RESEARCH AND DEVELOPMENT COSTS

Development costs are recognised as fixed assets from the date on which management makes the investment decision if, and only if, the costs can be measured reliably and the Group can prove the technical feasibility of completing the intangible asset, the existence of likely future economic benefits and its intention – as well as the availability of sufficient resources – to complete the development and use the asset. Internal procedures ensure that records are available on the date management takes the investment decision.

Development costs are amortised over the useful lives of the associated assets.

INTANGIBLE CONCESSION ASSETS AND OTHER INTANGIBLE ASSETS

Other intangible assets are recorded in the balance sheet at their historical value. They are systematically amortised over their useful life, less impairment, where applicable.

This item essentially comprises the intangible concession assets reflecting the reversionary assets relating to transport operations, recognised in accordance with IFRIC 12 – “Service concession arrangements” (see Notes 1.5 and 14).

Other intangible assets also comprise software that is amortised on a straight-line basis over three to ten years. Only specific development costs and configuration costs specific to the management systems deployed throughout RATP’s public service business are amortised over ten years.

	31/12/2014	Acquisitions	Retirements and disposals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2015
Gross value							
Lease rights	5,588	174	0	(30)	177	0	5,909
Research and development expenses	42	0	0	325	0	(325)	42
Concessions, patents and similar rights	448,125	1,404	(27,147)	50,108	484	(87)	472,887
Goodwill	2,508	0	0	(69)	68	0	2,507
Other intangible assets	48,407	397	(10)	1,024	3,485	0	53,302
Intangible concession assets	412,649	0	0	0	0	(43,306)	369,343
Other work in progress	65,068	82,156	0	(44,051)	10	0	103,183
TOTAL GROSS VALUE	982,386	84,130	(27,157)	7,307	4,224	(43,718)	1,007,172

	31/12/2014	Depreciation allowance	Retirements, disposals and reversals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2015
Accumulated amortisation and impairment							
Lease rights	(1,747)	(85)	0	0	(19)	0	(1,851)
Research and development expenses	(35)	(7,259)	0	0	0	7,252	(42)
Concessions, patents and similar rights	(346,964)	(38,807)	26,560	44	(471)	305	(359,333)
Goodwill	(813)	(55)	0	0	(21)	0	(889)
Other intangible assets	(17,986)	(4,319)	10	(13)	(1,137)	0	(23,445)
Intangible concession assets	(9,517)	0	0	0	0	(3,339)	(12,856)
TOTAL ACCUMULATED AMORTISATION AND IMPAIRMENT	(377,063)	(50,524)	26,570	31	(1,647)	4,218	(398,415)
Net value	605,323	33,605	(588)	7,337	2,576	(39,500)	608,757

	31/12/2015	Acquisitions	Retirements and disposals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2016
Gross value							
Lease rights	5,909	261	(1)	0	(478)	0	5,691
Research and development expenses	42	0	0	49	423	(48)	466
Concessions, patents and similar rights	472,887	2,137	(617)	56,085	168	(25)	530,635
Goodwill	2,507	0	(37)	37	(33)	0	2,474
Other intangible assets	53,302	261	0	1,442	(1,637)	0	53,367
Intangible concession assets	369,343	0	0	0	0	62,368	431,711
Other work in progress	103,183	82,269	0	(44,233)	27	0	141,246
TOTAL GROSS VALUE	1,007,172	84,928	(655)	13,380	(1,530)	62,295	1,165,590

	31/12/2015	Depreciation allowance	Retirements, disposals and reversals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2016
Accumulated amortisation and impairment							
Lease rights	(1,851)	(101)	0	0	58	0	(1,894)
Research and development expenses	(42)	(7,210)	0	0	(297)	7,170	(379)
Concessions, patents and similar rights	(359,333)	(41,061)	558	(109)	(124)	300	(399,770)
Goodwill	(889)	(53)	1	0	43	0	(898)
Other intangible assets	(23,445)	(8,696)	0	10	1,697	0	(30,434)
Intangible concession assets	(12,856)	0	0	0	0	(3,315)	(16,171)
TOTAL ACCUMULATED AMORTISATION AND IMPAIRMENT	(398,415)	(57,122)	559	(99)	1,376	4,155	(449,546)
Net value	608,757	27,806	(96)	13,281	(154)	66,450	716,044

The impact of RATP's concession assets is explained in Note 14.

10 Property, plant and equipment

As stated in Note 1.5, only RATP's fully-owned assets and the subsidiaries' property, plant and equipment are recorded in the consolidated balance sheet. They are first measured at acquisition or production cost, or at their fair value in the case of a business combination. They are subsequently carried net of accumulated depreciation and impairment losses.

In accordance with component-based accounting, RATP's fixed assets have been broken down into components and the useful life of each component has been determined based on their replacement or renovation frequency.

Given the current contractual compensation arrangement between RATP and the Île-de-France transport authority (Note 3.1), the C2 contribution covers the costs of loans to finance investments. Consequently, RATP does not capitalise interest.

When property, plant and equipment are subject to decommissioning obligations, the estimated cost of this obligation is initially included in the acquisition cost to offset provisions (Note 25).

Straight-line depreciation is the most appropriate method in economic terms. The depreciation periods used by the Group are as follows:

Categories	Method	Term
Railway infrastructure major asset	Straight-line	70 to 140 years
Railway infrastructure component asset	Straight-line	15 to 60 years
Building shell an brickwork	Straight-line	70 to 100 years
Bulding fixtures and fittings	Straight-line	6.66 to 30 years
Tracks	Straight-line	12.5 to 50 years
Automated train operating system (SAET) and track signaling	Straight-line	5 to 35 years
Rolling stock (rail)	Straight-line	15 to 40 years
Road rolling stock	Straight-line	4 to 10 years
Plant equipment, fixture and fittings	Straight-line	5 to 50 years
Other plants, property and equipment	Straight-line	3 to 15 years

The useful lives of property, plant and equipment are reviewed annually if there are significant changes.

	31/12/2014	Acquisitions	Retirements and disposals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2015
Gross value							
Land	532,349	3,142	(8,980)	8,983	874	0	536,368
Investment property	1,077	0	0	0	0	0	1,077
Buildings	8,359,024	10,028	(265,871)	692,252	12,077	1,791	8,809,301
Technical plant, equipment and industrial tooling	4,553,725	11,287	(1,175,347)	447,739	5,531	151,830	3,994,766
Transport equipment	1,315,061	49,144	(226,707)	768,445	48,462	(187,995)	1,766,410
Other property, plant and equipment	262,034	3,982	(91,463)	21,390	6,528	(240)	202,231
Work in progress	2,141,427	1,757,171	(43)	(1,942,636)	158	11,373	1,967,448
Investment grants	(7,230,856)	(888,459)	4,562	0	(95)	(2,268)	(8,117,116)
TOTAL GROSS VALUE	9,933,842	946,295	(1,763,849)	(3,828)	73,534	(25,509)	9,160,485

	31/12/2014	Depreciation allowance	Retirements, disposals and reversals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2015
Accumulated depreciation and impairment							
Land	(34)	(3,304)	4,456	0	0	597	1,715
Investment property	(817)	0	0	0	0	0	(817)
Buildings	(3,214,548)	(237,553)	248,675	330	(2,474)	(9,127)	(3,214,698)
Technical plant, equipment and industrial tooling	(3,150,271)	(247,288)	1,173,173	9	(4,075)	(167,388)	(2,395,840)
Transport equipment	(412,896)	(323,127)	215,337	571	(24,393)	51,082	(493,427)
Other property, plant and equipment	(203,147)	(18,874)	91,115	186	(3,748)	338	(134,129)
Fixed assets in progress	0	0	0	0	0	0	0
Investment grants	2,371,865	(5,001)	200,609	0	2	3,703	2,571,178
TOTAL ACCUMULATED AMORTISATION AND IMPAIRMENT	(4,609,848)	(835,147)	1,933,365	1,096	(34,688)	(120,795)	(3,666,018)
Net value	5,323,994	111,148	169,516	(2,732)	38,846	(146,304)	5,494,467

	31/12/2015	Acquisitions	Retirements and disposals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2016
Gross value							
Land	536,368	27	(3,526)	31,172	(1,638)	0	562,402
Investment property	1,077	0	0	0	0	0	1,077
Buildings	8,809,301	1,349	(7,100)	266,972	(4,490)	(20,964)	9,045,069
Technical plant, equipment and industrial tooling	3,994,766	8,767	(39,014)	256,281	(1,198)	(32,380)	4,187,223
Transport equipment	1,766,410	45,889	(168,698)	743,935	(19,007)	(253,892)	2,114,638
Other property, plant and equipment	202,231	5,148	(3,815)	12,393	1,405	79	217,440
Work in progress	1,967,448	1,711,537	(303)	(1,376,467)	(276)	118,703	2,420,641
Investment grants	(8,117,116)	(821,509)	13,609	0	(13)	(1,975)	(8,927,004)
TOTAL GROSS VALUE	9,160,485	951,208	(208,847)	(65,714)	(25,216)	(190,429)	9,621,486

	31/12/2015	Depreciation allowance	Retirements, disposals and reversals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2016
Accumulated depreciation and impairment							
Land	1,715	(3,312)	3,251	(1,752)	0	599	501
Investment property	(817)	0	0	0	0	0	(817)
Buildings	(3,214,698)	(241,986)	13,658	(1,693)	763	22,284	(3,421,671)
Technical plant, equipment and industrial tooling	(2,395,840)	(229,013)	29,158	2,227	1,130	30,380	(2,561,957)
Transport equipment	(493,427)	(354,615)	161,714	551	14,013	106,438	(565,326)
Other property, plant and equipment	(134,129)	(26,939)	3,463	(157)	(843)	193	(158,413)
Fixed assets in progress	0	0	0	0	0	0	0
Investment grants	2,571,178	215,427	(1,906)	56,522	3	3,864	2,845,088
TOTAL ACCUMULATED AMORTISATION AND IMPAIRMENT	(3,666,018)	(640,438)	209,338	55,698	15,066	163,758	(3,862,595)
Net value	5,494,467	310,770	491	(10,016)	(10,150)	(26,671)	5,758,891

The impact of RATP's concession assets is explained in Note 14.

Work in progress mainly reflects projects relating to new railway rolling stock, the replacement of trains and metro line extensions.

Commitments relating to acquisitions of property, plant and equipment are presented in Note 34.1.

As at 31 December 2016, there were no assets pledged or used as collateral.

11 Investment grants

Grants are recognised if there is reasonable assurance that the Group will meet grant conditions and the grant will be received.

Grants are allocated to particular assets and are presented as a deduction in those assets. They are transferred to the income statement over the useful life of the assets as asset depreciation is recorded.

The special interest rate obtained on loans granted by the Île-de-France region is presented in the same way as other investment grants.

Property, plant and equipment held under finance leases is shown below:

	31/12/2016	31/12/2015
Gross value	77,107	75,166
Accumulated depreciation	34,980	32,113
CARRYING AMOUNT	42,127	43,053

Lease commitments

Balance sheet item	Lease payments		Outstanding lease payments			Residual price
	for the financial year	cumulative	up to 1 year	+1 to 5 years	+5 years	
Buildings					2,840	
Transport equipment	2,387	28,967	2,848	15,328	16,139	2,287
Other property, plant and equipment	3,736	26,565	2,795	5,320		
Total	53	174	142			
TOTAL	6,176	55,706	5,785	20,649	16,139	2,287

Loans and borrowings corresponding to these assets are presented in Note 26.

12 Leases

12.1 OPERATING LEASES

Operating lease payments are expensed in the income statement on a straight-line basis over the duration of the lease.

Lease payments of €86,308 thousand were recognised in the income statement for operating leases.

12.2 FINANCE LEASES

Leases are classified as finance leases when in essence, the terms of the lease transfer almost all of the risks and rewards of ownership of the underlying asset to the lessee. Assets held under finance leases are initially recognised as assets, with an offsetting entry under liabilities, at their fair value or, if lower, at the present value of the future minimum lease payments. Subsequently, the lease payments are accounted for as repayments of the liability and are broken down into repayment of principal and interest based on the rate specified in the lease or the discount rate used to measure the outstanding liability.

The Group mainly uses finance leases for its buildings and rolling stock.

13 Significant lease operations

13.1 AMERICAN LEASEHOLD

Between 1997 and 2002, RATP entered into a number of leaseholds. In this context, RATP granted the right to use its assets through arrangements that enable foreign investors in the United States to assume economic ownership of the assets, which allows them to depreciate the assets and benefit from tax breaks. This financial gain is shared between the investor and RATP.

A leasehold transaction is composed of the main lease granted by RATP and a sub-lease enabling RATP to retain the rights to use its assets. In economic and accounting terms, no transfer takes place and RATP retains the main risks and rewards of ownership of the equipment. RATP has an Early buyout option (EBO) for a period shorter than the full term of the lease, which enables it to unwind the arrangement by repurchasing the outstanding portion of the lease. The arrangement includes deposits set up for guaranteeing payment for this option.

The various contracts that make up each leasehold arrangement are recognised as constituting separate transactions under SIC 27 and are accounted for as such. As the assets (including deposits) and liabilities related to these contracts generate cash flows that are fully offset in the balance sheet and income statement, the overall gain generated by each transaction is reported in a single line as Net present value (NPV). The gain is recorded as deferred income when the contracts are signed and then is recognised as financial income on a straight-line basis over the term of the lease. The gross amount of assets recognised was €675.2 million and liabilities €680.3 million. These amounts are offset by €675.2 million, and therefore the net balance recognised was €5.1 million.

As at 31 December 2016, there were eight agreements outstanding with two investors – the Bank of America and State Street.

The risks assumed by RATP are limited to equipment ownership risk, risks relating to French legislation and counterparty risk on the deposits. Counterparty risk is managed:

- by defeasance agreements, which enable deposits to be offset against the associated liabilities. The corresponding deposits totaled €163.4 million at 31 December 2016;
- either through collateral agreements, which require the deposits to be replaced by American treasury bonds if the credit rating of the deposits falls below a certain threshold. The net amount of the corresponding deposits totaled €44.3 million at 31 December 2016;
- by American treasury bonds: the deposits totaled €101.2 million as at 31 December 2016.

Furthermore, the US dollar deposits remaining after the early termination of the arrangements between 2007 and 2009 are no longer offset and are thus recognised in the balance sheet under “Other financial assets” (see Note 19).

13.2 SWEDISH LEASE

The Swedish lease agreement is effective in the period prior to equipment delivery. The investor pays the supplier the total value of the equipment, as from the beginning of the agreement. RATP leases the equipment over an eighteen-year period, at the end of which it may exercise its buyback option. The assets financed through the Swedish lease agreement are recognised under the consolidated balance sheet assets.

These arrangements enabled RATP to realise a financial gain when the contract was signed. This gain was deducted from the acquisition cost of the equipment and is recognised as income in proportion to the assets’ depreciation.

14 Service concession arrangements

Service concession arrangements fall within the scope of IFRIC 12 – “Service Concession Arrangements” if the concession assets are controlled by the grantor. The grantor effectively controls these assets if the following two conditions are met:

- the grantor controls or regulates which services must be provided with the concession assets, and determines to whom these services must be provided and at what price;
- the grantor controls the concession assets, which means having the right to any residual interest in these assets at the end of the arrangement.

Under IFRIC 12, the concession assets used may not be recognised as property, plant and equipment by the operator, but as an intangible asset (“intangible asset model”) and/or as a financial asset (“financial asset model”), depending on the remuneration agreed with the grantor.

FINANCIAL ASSET MODEL

For service concessions, a financial asset is recognised when the operator has an unconditional contractual right to receive a determined amount from the grantor. Financial assets arising from the application of IFRIC 12 are recognised under “Financial concession assets” in the consolidated balance sheet. They are recognised at amortised cost. The consideration receivable is recognised in revenue.

INTANGIBLE ASSET MODEL

The intangible asset model applies if the operator has the right to charge users of a public service.

HYBRID MODEL

When only part of the investment is subject to a payment commitment from the grantor, the amount guaranteed by the grantor is recognised as a financial asset, and the remaining value is recognised as an intangible asset according to the hybrid model.

RATP group considers that the operating agreements for RATP's transport services in Île-de-France, including the multi-year agreement entered into with the Île-de-France transport authority, and certain agreements with RATP Dev's transport subsidiaries, should be accounted for under IFRIC 12. To this effect, the concession assets cannot be recorded in the Group's balance sheet as property, plant and equipment.

The Île-de-France transport authority 2016-2020 agreements fall under the field of application of IFRIC 12 as:

- the services rendered correspond to a public service mission;
- the Île-de-France transport authority determines what transport services must be provided and the pricing policy;
- the assets necessary for operations are returnable and reversionary concession assets, and the Île-de-France transport authority controls a significant residual interest in these assets at the end of the concession period:
 - for rolling stock and related maintenance equipment classified as returnable assets, when the operating rights expire, the Île-de-France transport authority will repurchase the assets at their carrying amount net of grants, corresponding to the amount reported in the financial statements where the assets are recognised under property, plant and equipment,
 - for assets necessary for operations (such as bus stations, etc.) classified as reversionary assets, the Île-de-France transport authority can exercise a buyback option when the operating rights expire.

Contributions paid by the Île-de-France transport authority to RATP include the C2 contribution to fund investments. The contribution covers the cost of capital employed, including interest expense and net depreciation expense. This financing mechanism grants RATP financial receivables corresponding to the carrying amount, net of grants, of the returnable assets at the reporting date, and the reimbursement of depreciation and amortisation expenses until the end of the current agreement with the Île-de-France transport authority. The portion of contribution covering returnable and reversionary assets is dedicated to the compensation and reimbursement of financial receivables.

The financial receivables relating to returnable assets are recovered by paying the portion of C2 contribution covering the depreciation and amortisation expenses and payment of the carrying amount when the operating rights expire, based on the amounts reported in the

financial statements. The financial asset model is applied to returnable assets insofar as RATP has an unconditional right to receive cash from the Île-de-France transport authority until the end of the concession period, regardless of user traffic.

For reversionary concession assets, the receivables recognised as financial assets reflect the reimbursement of depreciation and amortisation expenses, based on the amounts reported in the financial statements until 2020, which is the expiry date of the agreement with the Île-de-France transport authority, during which RATP has an unconditional right to receive cash from the Île-de-France transport authority for the 2016-2020 period. The share of the residual carrying amount of the reversionary public concession assets, which was not recognised as a receivable in accordance with IFRIC 12, is recognised under intangible assets.

Their useful lives correspond to those applied by the Group for similar property, plant and equipment and intangible assets (Note 10).

The portion of the financial receivable due within one year was recognised as "Current financial concession assets", and the portion that is due later than one year was recognised as "Non-current financial concession assets".

Pursuant to IAS 39, receivables relating to financial concession assets are measured at amortised cost and impaired if the carrying amount is higher than the present value of the discounted future cash flows.

The remuneration of this financial asset is included in revenue.

Pursuant to IAS 18 "Revenue", acquisitions of returnable assets are accounted for as purchase transactions in the period recognised under cost of sales. The grantor accounts for them as sales recognised under revenue from ordinary activities.

At the subsidiary level, the receivables recognised as financial assets reflect the reimbursement of depreciation and amortisation expenses, based on the amounts reported in the financial statements until the expiry date of the current agreements. During this period, RATP has an unconditional right to receive cash from the transport authority. At the end of the concession period, the transport authority shall have the right to exercise its reversionary option (see Note 1.5). Consequently, the residual carrying amount of the reversionary public concession assets at the expiry date of the present agreements is recognised under intangible assets.

The carrying amount of the financial concession assets as at 31 December 2016 is:

	31/12/2016	31/12/2015
Gross amount	3,899,597	3,942,450
Other	0	0
Financial concession assets – non-current	3,899,597	3,942,450
Gross amount	277,861	272,536
Other	0	0
Financial concession assets – current	277,861	272,536

The effect of applying IFRIC 12 on the income statement for financial year 2016 is as follows:

	31/12/2016 prior to IFRIC 12	Cancelled depreciation and amortisation ⁽¹⁾	Canceled C2 contribution ⁽²⁾	Compensation of concession financial assets ⁽³⁾	Purchase/sale transactions ⁽⁴⁾	31/12/2016 after IFRIC 12
Revenue	5,748,695		(416,874)	115,946		5,447,767
Other income from ordinary activities	89,160				252,596	341,756
Revenue	5,837,855	–	(416,874)	115,946	252,596	5,789,523
Cost of sales	(377,455)				(252,596)	(630,051)
Other purchases and external charges	(875,597)					(875,597)
Tax, duties and other payables	(325,353)					(325,353)
Payroll costs	(3,144,924)					(3,144,924)
Other operating expenses	(27,655)					(27,655)
EBITDA	1,086,871	–	(416,874)	115,946	–	785,943
Depreciation allowance	(687,021)	300,928				(386,093)
Provisions, net	(18,300)					(18,300)
Gain on disposal of assets	(6,755)					(6,755)
Gain on other consolidation scope changes	(461)					(461)
Impairment	0					0
Other operating income (expenses)	230					230
Income from equity-accounted associates	7,531					7,531
Operating income (EBIT)	382,095	300,928	(416,874)	115,946	–	382,095

(1) The concession assets recognised under assets on the consolidated balance sheet consist of property, plant and equipment and intangible assets recorded in the separate financial statements. Thus, they do not generate any depreciation in the income statement of RATP group.

(2) Pursuant to IFRIC 12, the contribution paid to fund concession assets is not recognised in the income statement (excluding remuneration of the receivable). The contribution reduces the amount of financial concession assets.

(3) Financial concession assets are remunerated at the rate set in the Île-de-France transport authority agreement.

(4) The expenses incurred by RATP for investments in returnable assets are recognised in the income statement and transferred to the Île-de-France transport authority as they are capitalised. RATP is responsible for all relations with manufacturers and suppliers.

15 Asset impairment tests

IMPAIRMENT OF CASH-GENERATING UNITS (CGUs)

The assets to be tested for impairment are combined in cash-generating units (CGUs).

A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

The CGUs defined for RATP correspond to Infrastructure management (IM) and Transport operations (TO) activities (see Note 32).

The other CGUs are defined at subsidiary level in terms of the business or geographical area: France/Switzerland, Italy, USA, United Kingdom, Asia and Sightseeing. These CGUs are included in the Transport operations operating segment.

An impairment test is carried out:

- annually on all CGUs containing goodwill or other intangible assets with indefinite useful lives; or

- when there is an indication of impairment.

For impairment testing, the carrying amount of the CGU is compared to its recoverable value. The recoverable value of a CGU is the higher of its fair value less costs to sell and its value in use. In the event of impairment, an impairment loss is recognised in operating income. Impairment losses on goodwill cannot be reversed.

Value in use is determined by discounting the CGU's expected future cash flows using an appropriate discount rate based on the nature of the business, and taking into consideration its residual value.

IMPAIRMENT OF OTHER NON-FINANCIAL ASSETS

For all non-financial assets, impairment testing is performed whenever there is an indication of impairment. The carrying amount of the non-financial asset is compared to its recoverable value, which is defined as the higher of the selling price, less costs to sell, and its value in use.

15.1 RATP'S CASH-GENERATING UNITS (CGUs)

The ORTF law on public passenger transport has limited the duration of operating rights granted to RATP, set forth ownership regimes and specified what happens to assets upon contract expiry. It has also set out the compensation arrangements for infrastructure management and line operations in order to ensure that costs are covered and there is a return on capital employed.

The French tax authorities' terms for corporate income tax liability led to the implementation of impairment testing for RATP's CGUs, IM and TO. The tests were carried out based on the value of the assets as at 1 January 2016. The allocation of these asset values between Infrastructure management and Transport operations was done according to the legal and regulatory provisions applicable to RATP.

The carrying amount of the assets tested in each CGU includes:

- fixed assets (depreciable property, plant and equipment and amortisable intangible assets) net of grants;
- intangible assets and financial assets recognised under IFRIC 12;
- working capital requirements.

As these activities were created by RATP, the CGUs do not have any goodwill, or intangible assets with indefinite useful lives.

MAIN ASSUMPTIONS USED TO DETERMINE RECOVERABLE VALUE

The recoverable value of the assets corresponds to the value in use, which is determined on the basis of future cash flows net of tax, which were forecast using the following data:

- for 2016-2020: on the basis of RATP's business plan approved by the State and based on the financial provisions of the STIF-RATP agreement for 2016-2020, discounted as required by changes to interest rates;
- beyond 2020: data and cash flows (including normative cash flows) were determined according to the provisions of IAS 36 by estimating the terminal value of the assets tested in accordance with applicable standards.

Beyond 2020:

- for TO, investment assumptions specific to rolling stock were accounted for until the return of the returnable assets to the Île-de-France transport authority;
- for IM, the standard investment for renewal is estimated at €296 million.

Terminal values were calculated based on normative cash flows determined at the end of the period specified in the plan and projected to infinity on the basis of a perpetual growth rate corresponding to the long-term estimated inflation rate. Concerning TO, cash flows are projected until the end of the operating rights by estimating corresponding terminal values for each expiry date of the operating rights.

	Cash-generating units (CGUs)	
	Infrastructure management	Transport operations activity
Method for determining the recoverable value	Value in use	Value in use
		Discount rate specific to rolling stock: 3.7%
Discount rate	4.6%	Discount rate for the other fully-owned assets and reversionary (concession) assets: 5.3%
Growth rate	2.0%	2.0%

The estimated discount rate (weighted average cost of capital) was determined using the average rates observed for a panel of listed companies with similar activities to RATP. A specific discount rate was adopted for Transport operations rolling stock (returnable assets) given the compensation arrangements for these assets, *i.e.* 3.7%. For other assets used in Transport operations (fully-owned and reversionary assets), a discount rate of 5.3% was applied, in line with the rates used by the panel.

RESULTS OF THE IMPAIRMENT TESTS

The impairment tests performed on the Infrastructure management and Transport operations CGUs did not reveal any impairment losses. Consequently, no impairment losses were recognised in the consolidated financial statements for the financial year.

SENSITIVITY OF RECOVERABLE VALUES

Sensitivity tests were performed to confirm the results of the impairment tests. Based on the assets tested at their value in IFRS:

- a +0.96% change in discount rate for the Infrastructure management CGU and +0.74% for the Transport operations CGU, which would bring into line the recoverable value and net carrying amount of each CGU;
- a -1.15% change in terminal growth rate for the Infrastructure management CGU and -0.40% for the Transport operations CGU, which would bring into line the recoverable value and net carrying amount of each CGU;
- a change of +€116 million in investment renewals for the Infrastructure management CGU and +€30 million for the Transport operations CGU, which would bring into line the recoverable value and net carrying amount of the CGU.

15.2 OTHER CASH-GENERATING UNITS (CGUS) – RATP DEV

Impairment tests were performed on the other existing CGUs at 31 December 2016. The recoverable value of the principal CGUs was determined on the basis of the following key assumptions:

	Cash-generating units (CGUs)			
	France/Switzerland	United Kingdom	USA	Sightseeing
Method for determining the recoverable value	Value in use	Value in use	Value in use	Value in use
Discount rate	5.4%	5.4%	5.6%	6.5%
Terminal growth rate	2.0%	2.0%	2.0%	2.0%

The estimated discount rate (weighted average cost of capital) was determined using the average rates observed for a panel of listed companies with activities similar to those of the Group, by estimating risk-free payments specific to each country, and a specific risk premium for the “Sightseeing” activity.

The impairment tests performed did not reveal any impairment losses on the CGUs defined above.

During the year, no other event was likely to have an impact on the goodwill values recorded after the impairment tests performed on the CGUs.

16 Interest in the subsidiaries

The list of fully-consolidated RATP subsidiaries is supplied in Note 38. As regards the individual contribution of these subsidiaries in the Group’s financial statements, none is considered materially significant (contributions individually less than 10% of revenue). The largest of them represents less than 5% of revenue. The share of non-controlling interests in the financial statements is not significant either.

Given the weak individual importance of shares in the subsidiaries, the Group deems that it is not exposed to specific risks per entity that could have a significant impact on the financial statements.

17 Equity-accounted investments

17.1 INVESTMENTS IN EQUITY-ACCOUNTED ENTITIES

Equity-accounted investments comprise associates and joint ventures. The shares in these entities are analyzed as follows:

Group companies	31/12/2016				31/12/2015			
	% interest	Equity-accounted investments	Of which share of net income	Of which share of other items of comprehensive income	% interest	Equity-accounted investments	Of which share of net income	Of which share of other items of comprehensive income
Systra group	41.92	104,527	4,744	99	41.92	106,129	5,976	178
Other associates		7,573	759	(31)		6,907	(2,393)	(36)
Joint ventures		27,426	2,028	677		23,969	(12)	2,793
TOTAL		139,526	7,531	745	TOTAL	137,005	4,617	2,935

17.2 MAJOR JOINT VENTURES AND ASSOCIATES

Among equity-accounted associates, Systra is considered to be a significant associate.

Systra is a consulting and engineering group operating in the sector of public rail transport. It has approximately 30 subsidiaries and 20 branches worldwide.

Statement of financial position – Systra

	31/12/2016	31/12/2015
Non-current assets	190,472	149,397
Current assets	510,752	488,651
Non-current liabilities	103,919	64,405
Current liabilities	407,498	382,268
NET ASSETS (100%)	189,807	191,375
Percentage of equity holding	41.9%	41.9%
Group share in net assets	78,299	79,901
Goodwill	26,228	26,228
EQUITY VALUE	104,527	106,129

Income statement – Systra

	31/12/2016	31/12/2015
Revenue	610,596	627,219
Net income (100%)	11,316	14,254
Group share in net income	4,744	5,976
Other comprehensive income	99	178

The other joint ventures and associates are not individually significant. These entities are essentially bus, tramway and/or metro network operating businesses, similar to those of fully-consolidated entities.

18 Available-for-sale financial assets

Available-for-sale (AFS) financial assets primarily consist of unconsolidated investments or shares in UCITS funds, which are not defined as cash and cash equivalents, and assets that do not meet the definition of other financial assets.

They are measured at fair value. Subsequent changes in fair value are recognised in other comprehensive income under equity until their disposal. However, if there is an indication of a significant or lasting impairment of an AFS asset, the accumulated impairment loss is recognised in the income statement. If there is an improvement in the value following an impairment loss and it relates to equity instruments, it is recognised under other comprehensive income.

If fair value cannot be determined reliably for unlisted securities, the fair values are stated at cost less any impairment losses.

	31/12/2015					Financial assets as at 31/12/2015
	Financial assets as at 01/01/2015	Increase	Decrease	Currency translation gains and losses	Other	
Total gross value	18,066	35,407	(3,630)	29	(662)	49,210
Other	(10,119)	55	1	0	0	(10,063)
TOTAL NET VALUE	7,947	35,462	(3,629)	29	(662)	39,147

	31/12/2016					Financial assets as at 31/12/2016
	Financial assets as at 01/01/2016	Increase	Decrease	Currency translation gains and losses	Other	
Total gross value	49,210	25	(1,421)	(22)	(2,329)	45,462
Other	(10,063)	(1,220)	1,220	0	0	(10,063)
TOTAL NET VALUE	39,147	(1,195)	(201)	(22)	(2,329)	35,399

Available-for-sale financial assets primarily comprise non-consolidated investments. Impairment losses reflect impairment, when the value of the investments is significantly less than their carrying amount or less than their carrying amount for extended periods.

Available-for-sale financial assets relate to the following:

	Net value	% interest
SA HLM Logis-Transports ⁽¹⁾	33,126	99
Irise	750	10
RATP <i>via</i> Quatro	572	
Linea ⁽²⁾	826	33
Other	125	
TOTAL	35,399	

(1) SA HLM Logis-Transports is excluded from the scope of consolidation for the reasons mentioned in Note 2.1. Financial data at 31 December 2015 for SA HLM Logis-Transports:

- revenue: €58,683 thousand in 2015;
- balance sheet total = €751,789 thousand, including €353,610 thousand of net debt;
- net income: €10,778 thousand.

(2) RATP holds shares in this company (any dividends received are recorded by Autolinee), but does not exercise any influence over management. Linea operates another intercity network in Florence and is the partner of Autolinee in the business combination that was awarded the contracts.

19 Other financial assets

Other financial assets mainly consist of receivables relating to subsidiaries and affiliated companies, loans and security deposits.

These financial assets are initially measured at fair value, then at amortised cost using the effective interest rate method.

Impairment tests are performed when there is an indication that the present value of the flows using the initial effective interest rate is lower than the carrying amount. Impairment is recorded in the income statement.

19.1 OTHER NON-CURRENT FINANCIAL ASSETS

	31/12/2014	Increase	Decrease	Currency translation gains and losses	Other	31/12/2015
Deposits relating to leases	346,738	27,923	(158,976)	0	114,880	330,565
Fair value deposits	174,577	0	(53,421)	0	13,139	134,295
Housing loans	38,314	21	(2)	0	(3,952)	34,381
Other loans and receivables	19,205	23,815	(23,691)	1	128	19,459
Other non-current financial assets	578,834	51,759	(236,090)	1	124,195	518,700
Provisions for other financial assets	(192)	12	8	0	33	(139)
Other non-current financial assets	578,642	51,771	(236,082)	1	124,228	518,561

	31/12/2015	Increase	Decrease	Currency translation gains and losses	Other	31/12/2016
Deposits relating to leases	330,565	11,255	(78,842)	0	15,187	278,165
Fair value deposits	134,295	0	(1,266)	0	5,013	138,042
Housing loans	34,381	0	(1)	0	(3,251)	31,129
Other loans and receivables	19,459	18,848	(16,328)	10	(6,043)	15,945
Other non-current financial assets	518,700	30,103	(96,437)	10	10,906	463,281
Provisions for other financial assets	(139)	(18)	30	0	0	(127)
Other non-current financial assets	518,561	30,085	(96,407)	10	10,906	463,154

Deposits relating to leases (at amortised cost) concern contracts terminated before expiry of the lease period. They are allocated to the borrowings for lease terminations under loans and borrowings (Note 26.2).

Loans mainly correspond to the housing loans granted by RATP to low-cost housing management companies (CIL).

19.2 OTHER CURRENT FINANCIAL ASSETS

	31/12/2015				
	31/12/2014	Increase/decrease	Currency translation gains and losses	Other	31/12/2015
Dividends receivable	0	0	0	0	0
Housing loans	7,547	0	0	(1,705)	5,842
Deposits relating to leases	184,937	0	0	(114,137)	70,800
Other loans, deposits and guarantees	463	(58)	24	(2)	427
Cash collateral relating to leases	503,722	(124,922)	0	0	378,800
OTHER FINANCIAL ASSETS – CURRENT	696,669	(124,980)	24	(115,844)	455,869

	31/12/2016				
	31/12/2015	Increase/decrease	Currency translation gains and losses	Other	31/12/2016
Dividends receivable	0	4	0	0	4
Housing loans	5,842	0	0	(892)	4,950
Deposits relating to leases	70,800	0	0	(20,725)	50,075
Other loans, deposits and guarantees	427	169	16	(41)	569
Cash collateral relating to leases	378,800	(36,600)	0	0	342,200
Other investments – current	0	32,159	0	10,008	42,167
OTHER FINANCIAL ASSETS – CURRENT	455,869	(4,268)	16	(11,650)	439,965

The cash collateral corresponds to the amounts paid as guarantee for loans related to lease terminations found under loans and borrowings (Note 26.2).

20 Inventories

Inventories and assets under production are measured at the lower of cost (including associated transaction costs) and net realisable value. Cost is calculated using the weighted average cost method.

Impairment is recorded where the cost is greater than the net realisable value.

20.1 DETAILS OF INVENTORIES BY TYPE

	31/12/2016			31/12/2015		
	Gross value	Impairment	Net value	Gross value	Impairment	Net value
Raw materials and supplies	248,049	(50,572)	197,476	233,392	(45,332)	188,060
Other supplies	890	0	890	1,226	0	1,226
Work in progress	7,218	0	7,218	5,860	0	5,860
Merchandise	403	0	403	311	0	311
Finished goods	2,842	(117)	2,725	2,753	0	2,753
TOTAL	259,401	(50,689)	208,712	243,542	(45,332)	198,210

20.2 CHANGES IN INVENTORY IMPAIRMENT LOSSES

	31/12/2015	Additions	Reversals	Foreign currency translation differences	Other and reclassification	31/12/2016
Impairment of inventories	(45,332)	(5,498)	249	9	0	(50,572)
Impairment of work in progress	0	0	25	0	(142)	(117)
Impairment of inventories of merchandise	0	0	0	0	0	0
TOTAL	(45,332)	(5,498)	274	9	(142)	(50,689)

21 Operating receivables

Trade and other receivables are recorded at fair value, which equates to their face value, as the effect of discounting is not material for assets that are due within one year.

Impairment is recorded if there is risk of non-recovery, to reduce the carrying amount to probable realisable value.

	31/12/2016	31/12/2015
Trade receivables	283,957	253,258
Impairment of trade receivables	(8,701)	(8,613)
Trade receivables	275,256	244,645
Advance payments	4,193	5,322
Prepaid expenses	50,631	50,791
State and local authority receivables	253,024	205,107
Investment grants receivable	335,964	329,316
Other receivables	125,539	112,425
Income tax receivables	76,362	17,158
Impairment of other receivables	(8,619)	(4,437)
Other receivables	837,094	715,681
TOTAL TRADE AND OTHER RECEIVABLES	1,112,351	960,326

	31/12/2016	31/12/2015
Impairment of trade receivables, at beginning of year	(8,613)	(9,821)
Write-downs during the period	(2,538)	(2,728)
Unused reversals	1,158	0
Used reversals	1,291	3,937
IMPAIRMENT OF TRADE RECEIVABLES, AT THE END OF THE YEAR	(8,701)	(8,613)

All accounts receivable are due within one year.

22 Cash and cash equivalents

The line item “Cash and cash equivalents” includes bank accounts, liquid investments and cash equivalents.

Cash equivalents comprise risk-free investments, which can almost immediately be converted into cash and with negligible risk of change in value. They are held exclusively to meet the Group’s short-term cash requirements.

They include:

- negotiable instruments that are measured at their nominal value, as justified by their maturity date (less than three months) and credit risk level;
- shares in short-term money market UCITS investments, which are measured at net asset value at the reporting date;
- long-term deposits redeemable with no risk to invested capital, measured at their nominal value;
- collateral deposits.

	31/12/2016	31/12/2015
Marketable securities	619,420	648,987
Cash and cash equivalents	400,993	402,700
TOTAL	1,020,413	1,051,687

Total cash and cash equivalents presented in the cash flow statement comprise the following:

	31/12/2016	31/12/2015
Cash and cash equivalents (balance sheet)	1,020,413	1,051,687
Bank overdrafts	(158,596)	(50,020)
Closing cash and cash equivalents (cash flow statement)	861,817	1,001,667

23 Equity

23.1 CAPITAL ENDOWMENT

RATP was formed by the act of 21 March, 1948. However, no capital was transferred to it at that time. In 1986, the public authorities allocated capital to RATP, partially in exchange for the early repayment of the loans previously granted to it by the Economic and social development fund. The amount allocated was increased by €150 million in July 2010 as part of the national recovery plan announced at the start of 2009.

23.2 RESERVE FOR ASSETS ALLOCATED TO RATP

The equity contra-account entitled “Reserve for assets allocated to RATP” shown in liabilities essentially reflects the residual value at 1 January, 1949 – when RATP was created – of the assets provided for use by RATP at that time and that remained on the balance sheet at 31 December, 1976.

24 Provisions for employee benefits

Provisions for employee benefits comprise post-employment benefits and other long-term benefits.

	31/12/2016	31/12/2015
Provisions for retirement benefits	313,164	291,745
Provisions for death indemnities for retirees	41,526	37,590
Provisions for death indemnities for employees in service	16,270	15,082
Provisions for early retirement benefits	3,253	2,361
Provisions for work-related accident and disability pensions	296,446	244,624
Provision for retirement benefits of foreign subsidiaries	27,655	27,808
Total post-employment benefits	698,314	619,210
Provisions for phased retirement	617	1,465
Provisions for seniority bonuses	27,806	23,738
Provisions for long-term sick leave	2,328	5,432
Provisions for unemployment benefit	7,500	11,577
Provisions for work-related accident and disability pensions	22,034	20,071
Other provisions for long-term benefits	3,500	0
Total long-term benefits	63,784	62,283
TOTAL	762,098	681,493

24.1 POST-EMPLOYMENT BENEFITS

The net liability recorded in the balance sheet for post-employment benefit obligations corresponds to the present value of the defined benefit obligation at the reporting date. The present value of the obligation, as well as the cost of past services is calculated using the projected unit credit method. Under this method, rights to benefits are allocated to service periods in the same way as rights are acquired under the plan or on a straight-line basis when the rhythm of acquisition of the rights is not uniform and would significantly defer recognition of a provision for the obligation.

The amount of future payments for employee benefits is assessed using assumptions such as salary increase rate, retirement age, number of years' service to date and mortality tables. They are discounted to their present value using a discount rate specific to each geographic area and currency, namely:

- the Bloomberg fifteen-year eurobond composite rate for companies with an AA rating (for the eurozone);
- AA rated sterling-denominated corporate bonds (for UK companies).

Remeasurement of the net liability under post-employment benefit schemes (including changes in the liability and the financial assets due to changes in assumptions and experience adjustments) are recognised in "Other comprehensive income". They may not be recycled through profit or loss.

Any effects of plan changes (gains or losses) are immediately recognised in profit or loss.

24.1.1 DESCRIPTION OF THE VARIOUS POST-EMPLOYMENT BENEFIT SCHEMES

Retirement benefits

Employees are entitled to RATP retirement benefits, unless a more favorable scheme is in place. The amount of the benefit is based on the length of time the employee has been employed by the company. RATP pays retirement benefits to all its employees that fulfill the vesting conditions. Benefits are calculated on the basis of gross monthly remuneration and a coefficient to reflect the employee's hierarchical status at the retirement date. The coefficient reflects the number of annuities vested at the retirement date and is set by current employment agreements.

Death indemnities for retirees

RATP pays death indemnities to retirees who have vested rights in a seniority-based retirement or pension scheme. The amount of the indemnity is calculated at the time of death, at three times the monthly pension payment. The obligation is measured based on historical data.

Death indemnities for current employees

As for the State social security scheme, RATP's social security system provides life insurance coverage. The purpose of life insurance is to guarantee the payment of a "death indemnity" when a person covered by the policy dies. The amount is equal to twelve months of the employee's salary at the time of death. The purpose of the indemnity is to compensate the deceased's family for the loss of revenue from the employee's professional income.

Early retirement (benefits)

This scheme applies to employees suffering a work-related illness linked to asbestos. This allows agents to continue receiving a partial salary in the event of early retirement, upon request and according to their age.

Work-related accident and disability allowance

RATP does not contribute to the State scheme for work-related accidents and disability, as it makes the indemnity payments itself.

Employees who are victims of work-related accidents or illnesses, which result in permanent partial incapacity to work, may request a lump sum payment or an annual allowance for the rest of their lives. The committee on work-related accidents and illnesses decides whether the victim or those with vested rights are eligible and determines the amount of the allowance. The benefits are paid by the pension fund. The allowances are paid until the death of the beneficiary and are reversible, as appropriate.

Retirement benefit obligations of foreign subsidiaries

Some foreign subsidiaries – mainly in the United Kingdom – have defined benefit plans to cover their retirement benefit obligations. The obligations are partially covered by plan assets derived principally from local investments.

24.1.2 CHANGE IN PROVISIONS

Changes in provisions for post-employment benefits were as follows:

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Work-related accident and disability allowance	Early retirement (benefits)	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
Total net liability as at 1 January 2015	329,070	15,386	44,598	277,099	2,838	5,412	23,136	697,539
Current service cost and interest cost	24,140	1,484	668	16,231	43	40	7,876	50,482
Benefits paid	(20,743)	(1,454)	(1,373)	(9,976)	(692)	(5,452)	–	(39,690)
Actuarial (gains) losses	(42,111)	(334)	(6,303)	(38,730)	172	–	2,825	(84,481)
Asset ceiling effect (IFRIC 14)	–	–	–	–	–	–	178	178
Contributions paid into the plan	–	–	–	–	–	–	(7,767)	(7,767)
Changes in scope	1,391	–	–	–	–	–	–	1,391
Effect of change in exchange rates	(2)	–	–	–	–	–	1,559	1,558
NET LIABILITY RECOGNISED AS AT 31 DECEMBER 2015	291,745	15,082	37,590	244,624	2,361	–	27,808	619,210

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Work-related accident and disability allowance	Early retirement (benefits)	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
Total net liability as at 1 January 2016	291,745	15,082	37,590	244,624	2,361	–	27,808	619,211
Current service cost and interest cost	23,336	1,556	846	23,106	53	–	6,531	55,428
Benefits paid	(18,575)	(1,302)	(1,506)	(10,087)	(717)	–	–	(32,187)
Actuarial (gains) losses	16,353	934	4,596	38,803	1,556	–	4,131	66,373
Asset ceiling effect (IFRIC 14)	–	–	–	–	–	–	(46)	(46)
Contributions paid into the plan	–	–	–	–	–	–	(7,354)	(7,354)
Changes in scope	270	–	–	–	–	–	–	270
Effect of change in exchange rates	35	–	–	–	–	–	(3,415)	(3,380)
NET LIABILITY RECOGNISED AS AT 31 DECEMBER 2016	313,164	16,270	41,526	296,446	3,253	–	27,655	698,314

24.1.3 RECOGNISED EXPENSE

The expense recognised for the year can be broken down as follows:

Expense recognised in 2015

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Work-related accident and disability allowance	Early retirement (benefits)	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
Service cost	(19,220)	(1,254)	–	(12,075)	–	–	(6,772)	(39,321)
Net interest cost	(4,920)	(230)	(668)	(4,156)	(43)	(40)	(723)	(10,780)
Other	–	–	–	–	–	–	(381)	(381)
IMPACT OF PAYROLL COSTS	(24,140)	(1,484)	(668)	(16,231)	(43)	(40)	(7,876)	(50,482)

Expense recognised in 2016

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Work-related accident and disability allowance	Early retirement (benefits)	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
Service cost	(16,803)	(1,217)	–	(17,602)	–	–	(5,561)	(41,182)
Net interest cost	(6,533)	(339)	(846)	(5,504)	(53)	–	(694)	(13,969)
Other	–	–	–	–	–	–	(277)	(277)
IMPACT OF PAYROLL COSTS	(23,336)	(1,556)	(846)	(23,106)	(53)	–	(6,531)	(55,428)

24.1.4 IMPACT ON OTHER COMPREHENSIVE INCOME

Actuarial gains and losses relating to post-employment benefits were as follows:

Amounts recognised directly in equity in 2015

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Work-related accident and disability allowance	Early retirement (benefits)	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
OPENING BALANCE	(42,208)	922	(7,918)	(83,761)	(8,266)	(25,500)	(7,276)	(174,007)
Remeasurements	42,111	334	6,303	38,730	(172)	–	(2,825)	84,481
Other	–	–	–	–	–	–	(663)	(663)
CLOSING BALANCE	(97)	1,256	(1,615)	(45,031)	(8,438)	(25,500)	(10,764)	(90,189)
of which experience adjustments for the period	1,140	(160)	(782)	(7,226)	216	–	(1,159)	(7,971)

Amounts recognised directly in equity in 2016

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Work-related accident and disability allowance	Early retirement (benefits)	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
OPENING BALANCE	(97)	1,256	(1,615)	(45,031)	(8,438)	(25,500)	(10,764)	(90,189)
Remeasurements	(16,353)	(934)	(4,596)	(38,803)	(1,556)	–	(4,131)	(66,373)
Other	–	–	–	–	–	–	1,286	1,286
CLOSING BALANCE	(16,450)	322	(6,211)	(83,834)	(9,994)	(25,500)	(13,609)	(155,275)
of which experience adjustments for the period	(5,682)	(342)	(585)	8,618	1,442	–	(1,619)	1,832

24.1.5 CHANGE IN OBLIGATION AND PLAN ASSETS

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Work-related accident and disability allowance	Early retirement (benefits)	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
Obligation as at 1 January 2015	329,070	15,386	44,598	277,099	2,838	5,412	144,846	819,249
Service cost	19,220	1,254	–	12,075	–	–	6,772	39,321
Interest cost	4,920	230	668	4,156	43	40	5,578	15,635
Employee contributions	–	–	–	–	–	–	131	131
Benefits paid	(20,743)	(1,454)	(1,373)	(9,976)	(692)	(5,452)	(5,023)	(44,713)
Actuarial gains/(losses)	(42,111)	(334)	(6,303)	(38,730)	172	–	(1,613)	(88,919)
Changes in scope	1,391	–	–	–	–	–	–	1,391
Effect of change in exchange rates	(2)	–	–	–	–	–	9,120	9,118
Other	–	–	–	–	–	–	(372)	(372)
Obligation as at 31 December 2015	291,745	15,082	37,590	244,624	2,361	–	159,438	750,840
Plan assets as at 31 December 2015	–	–	–	–	–	–	(133,230)	(133,230)
Obligation net of plan assets	291,745	15,082	37,590	244,624	2,361	–	26,208	617,610
IFRIC 14 accumulated adjustment	–	–	–	–	–	–	1,599	1,599
NET LIABILITY RECOGNISED AS AT 31 DECEMBER 2015	291,745	15,082	37,590	244,624	2,361	–	27,808	619,210

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Work-related accident and disability allowance	Early retirement (benefits)	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
Obligation as at 1 January 2016	291,745	15,082	37,590	244,624	2,361	–	159,439	750,841
Service cost	16,803	1,217	–	17,602	–	–	5,561	41,182
Interest cost	6,533	339	846	5,504	53	–	4,735	18,009
Employee contributions	–	–	–	–	–	–	89	89
Benefits paid	(18,575)	(1,302)	(1,506)	(10,087)	(717)	–	(5,439)	(37,626)
Actuarial gains/(losses)	16,353	934	4,596	38,803	1,556	–	25,116	87,357
Changes in scope	270	–	–	–	–	–	–	270
Effect of change in exchange rates	35	–	–	–	–	–	(21,836)	(21,800)
Other	–	–	–	–	–	–	(281)	(281)
Obligation as at 31 December 2016	313,164	16,270	41,526	296,446	3,253	–	167,382	838,041
Plan assets as at 31 December 2016	–	–	–	–	–	–	(141,102)	(141,102)
Obligation net of plan assets	313,164	16,270	41,526	296,446	3,253	–	26,281	696,939
IFRIC 14 accumulated adjustment	–	–	–	–	–	–	1,375	1,375
NET LIABILITY RECOGNISED AS AT 31 DECEMBER 2016	313,164	16,270	41,526	296,446	3,253	–	27,655	698,314
Estimate of payments in 2017	41,021	1,348	1,070	10,737	449	–	2,763	57,388

Plan assets of foreign subsidiaries

	31/12/2016	31/12/2015
Net asset recognised as at 1 January	133,230	123,005
Interest on assets	4,090	4,901
Employer contributions	7,354	7,422
Employee contributions	89	131
Benefits paid from plan assets	(5,439)	(5,023)
Actuarial gains/(losses)	20,985	(4,372)
Changes in scope	–	–
Effect of change in exchange rates	(18,649)	7,919
Other	(558)	(753)
NET ASSET RECOGNISED AS AT 31 DECEMBER	141,102	133,230

Plan assets of subsidiaries are invested as follows: approximately 43% in equities, 49% in bonds, 4% in real estate and the remainder in other financial assets.

24.1.6 ACTUARIAL ASSUMPTIONS

The main actuarial assumptions are as follows:

	31/12/2016		31/12/2015	
	Eurozone	United Kingdom	Eurozone	United Kingdom
Discount rate	1.50%	2.3% to 3.0%	1.9% to 2.5%	3.2% to 3.7%
Inflation rate	2.00%	2.2% to 3.3%	2,00%	2.7% to 3.0%
Salary increase rate including inflation	2.0% to 2.2%	2.2% to 3.5%	2.0% to 2.8%	1.7% to 2.5%
Mortality table	TGH 05/TGF 05	SAPS S1 NA	TGH 05/TGF 05	SAPS S1 NA
Retirement age	59.4 years	65	59.2 years	65
Pension revaluation rate	NA	1.9% to 3.5%	NA	1.7% to 2.5%
Turnover rate	0.00%	NC	0.00%	NC

An increase or decrease of 25 basis points in the discount rate would have increased or decreased aggregate post-employment obligations by +/-€32 million.

The average duration of post-employment obligations is fifteen years, as at the reporting date 2015.

24.2 OTHER LONG-TERM EMPLOYEE BENEFITS

Other long-term benefits are measured according to actuarial calculations. Actuarial gains and losses are recognised immediately in profit or loss.

24.2.1 DESCRIPTION OF LONG-TERM BENEFIT SCHEMES

Work-related accident and disability allowances

The allowances and indemnities for work-related accidents and illnesses paid to employees in service are accounted for as long-term benefits. The portion relating to retirees is accounted for under post-employment benefits (see description of the allowances in paragraph 24.1.1).

Seniority bonuses

After a specific number of years' service, employees receive seniority bonuses and additional holiday leave.

Phased retirement

This scheme previously enabled employees to opt for part-time employment remunerated at 70% for those under 55 years of age and at 75% for employees aged 55 and upwards. The scheme was closed to new contributors as of 2010.

Unemployment benefits

As for the State unemployment benefit fund (Assedic), RATP provides employees whose employment contracts have reached termination with replacement revenue known as "unemployment benefit" for a variable duration depending on the number of years of affiliation and the age of the employee. This compensation scheme for the termination of an employment contract is recognised in a similar way to a long-term benefit scheme, although the benefits are payable after the employee's employment ends.

Long-term sick leave

Employees with extended illnesses are granted sick leave to enable them to receive the medical treatment required. Although their employment contract is suspended, all or part of their salary is paid, subject to certain conditions.

	Seniority bonuses	Work-related accident and disability allowances	Phased retirement	Unemployment benefits	Leave for long-term illness	Total long-term benefits
Total net liability as at 1 January 2015	23,465	22,615	2,211	7,367	5,599	61,257
Service cost and interest cost	2,110	1,941	33	–	5,034	9,118
Benefits paid	(1,391)	(2,870)	(1,488)	(5,839)	(5,273)	(16,861)
Actuarial gains and losses	(447)	(1,615)	710	10,049	73	8,770
NET LIABILITY RECOGNISED AS AT 31 DECEMBER 2015	23,737	20,071	1,465	11,577	5,433	62,283

	Seniority bonuses	Work-related accident and disability allowances	Phased retirement	Unemployment benefits	Leave for long-term illness	Total long-term benefits
Total net liability as at 1 January 2016	23,737	20,071	1,465	11,577	5,433	62,283
Service cost and interest cost	2,365	3,552	33	–	2,530	8,480
Benefits paid	(1,508)	(2,710)	(1,141)	(11,259)	(5,161)	(21,779)
Actuarial gains and losses	3,211	1,121	260	7,182	(473)	11,301
NET LIABILITY RECOGNISED AS AT 31 DECEMBER 2016	27,805	22,034	617	7,499	2,329	60,284
Estimate of payments to defined benefit plans in 2017	1,464	2,807	464	–	–	4,735

24.2.2 MAIN ACTUARIAL ASSUMPTIONS

	31/12/2016	31/12/2015
Discount rate	1.50%	2.25%
Inflation rate	2.00%	2.00%
Salary increase rate including inflation	2.20%	2.80%
Mortality table	TGH 05/TGF 05	TGH 05/TGF 05
Retirement age	59.4 years	59.2 years
Turnover rate	0.00%	0.00%

An increase or decrease in the discount rate of 25 basis points would have decreased or increased aggregate long-term benefits by +/-€1.0 million.

The average duration of long-term obligations is fifteen years, as at the reporting date 2015.

25 Other provisions

A provision is recognised at the reporting date if the Group has a current obligation towards a third party as a result of a past event. It is probable that an outflow of economic benefits will be required to settle the obligation, and the obligation can be reliably estimated.

This obligation may be legal, regulatory, contractual or implicit.

The provision recognised corresponds to the estimated amount of resources the Group requires to settle the obligation. Provisions are discounted if the effect of discounting is material.

Decommissioning costs mainly concern railway rolling stock. A provision is recorded to offset the amount recorded under fixed assets, and the asset components are amortised over the useful life of the

trains. Any increase in the liability provisioned in terms of cost or term to maturity (decommissioning component) is capitalised in the value of the associated equipment. As the effect of discounting is not material, the provisions are not discounted.

The impact on profit or loss was as follows:

	31/12/2016	31/12/2015
Provisions, net	(18,300)	4,717

Various legal proceedings have been instituted against the company and its subsidiaries in the normal course of business. In certain cases, claims for damages have been made, which are provisioned when payment is probable and measurable.

	31/12/2014	Additional allowance	Provisions used	Unused provisions	Reclassification, changes of scope and exchange rate	31/12/2015
Non-current provisions	151,505	36,027	(15,046)	(16,142)	1,944	158,289
Decommissioning ⁽¹⁾	69,293	0		0	2,444	71,737
Disputes ⁽²⁾	19,284	9,537	607	(8,546)	1,190	22,072
Other expenses	28,880	7,002	(6,288)	0	(3,035)	26,559
Other risks ⁽³⁾	34,049	19,488	(9,366)	(7,596)	1,346	37,920
Current provisions	62,678	30,417	(18,971)	(13,775)	1,395	61,743
Decommissioning ⁽¹⁾	4,047	0	(3,704)	0	(343)	0
Disputes ⁽²⁾	16,809	12,204	(2,755)	0	1,142	27,400
Other expenses	9,047	2,003	(4,285)	(3,800)	558	3,523
Other risks ⁽³⁾	32,775	16,210	(8,228)	(9,975)	38	30,820
TOTAL PROVISIONS	214,183	66,444	(34,018)	(29,917)	3,339	220,032

	31/12/2015	Additional allowance	Provisions used	Unused provisions	Reclassification, changes of scope and exchange rate	31/12/2016
Non-current provisions	158,289	37,671	(18,634)	(11,022)	(5,879)	160,424
Decommissioning ⁽¹⁾	71,737	0	(6,744)	0	1,807	66,799
Disputes ⁽²⁾	22,072	3,774	(1,796)	(1,175)	(10,376)	12,499
Other expenses	26,559	7,116	(1,593)	0	(8,047)	24,034
Other risks ⁽³⁾	37,920	26,780	(8,500)	(9,847)	10,738	57,092
Current provisions	61,743	32,117	(16,042)	(6,474)	3,090	74,434
Decommissioning ⁽¹⁾	0	0	0	0	0	0
Disputes ⁽²⁾	27,400	7,082	(5,518)	(2,351)	502	27,116
Other expenses	3,523	5,276	(2,896)	0	4,249	10,152
Other risks ⁽³⁾	30,820	19,759	(7,629)	(4,123)	(1,661)	37,166
TOTAL PROVISIONS	220,032	69,788	(34,676)	(17,497)	(2,789)	234,858

(1) Provisions for decommissioning railway rolling stock are recorded with an offsetting entry under components of fixed assets. They are amortised over the useful lives of the trains.

(2) Provisions for litigation concern provisions for disputes and legal proceedings of a commercial nature or those instigated by employees involving asbestos-related illnesses contracted at work.

(3) Provisions for other contingencies comprise RATP's obligation to insure passenger accidents on its networks (basis: cases already declared) for an amount of €74,415. These provisions cover any excess in compensation for bodily harm and/or material damage not covered by the insurance contracts. The level of provisions is graduated according to the seriousness of the damage.

26 Loans and borrowings

Loans and borrowings mainly include bonds, loans from the Île-de-France region, loans from credit institutions and short-term bank loans.

They are initially recognised at their fair value, corresponding to the amount received less borrowing costs, then subsequently at amortised cost using the effective interest rate method.

For fair value hedges on loans and borrowings, the hedged part of loans and borrowings is recorded in the balance sheet at fair value,

based on market value. Changes in fair value are recorded in the income statement and are offset by symmetrical changes in the fair value of the hedging instruments.

26.1 ISSUANCE OF NEW DEBT SECURITIES

Under its Euro medium-term note (EMTN) program, RATP issued a new series of corporate debt securities during the financial year:

- notes for a nominal amount of €500 million in June 2016, maturing in June 2024 and bearing 0.375% interest.

26.2 BREAKDOWN OF CURRENT AND NON-CURRENT LOANS AND BORROWINGS

	31/12/2016	31/12/2015
Bonds	4,764,436	4,677,211
Île-de-France loans	179,458	200,441
Loans relating to lease terminations	278,166	330,565
Borrowings from credit institutions	135,059	146,573
Loans related to finance leases	33,801	34,622
Deposits and guarantees received	5,788	3
Other loans and borrowings	5,618	5,291
Non-current loans and borrowings	5,402,326	5,394,705
Bonds	419,042	184,587
Île-de-France loans	20,478	20,751
Corporate savings plan loans	325,330	389,993
Loans relating to lease terminations	50,075	70,800
Borrowings from credit institutions	51,222	53,360
Loans related to finance leases	4,774	7,592
Deposits and guarantees received	189,300	203,274
Commercial paper	992,117	1,226,680
Other loans and borrowings	23	28
Bank loans	158,596	50,020
Accrued interest	68,107	67,880
Current loans and borrowings	2,279,064	2,274,965
TOTAL	7,681,390	7,669,670

26.3 MEASUREMENT OF NET DEBT

The Group defines net debt as total outstanding loans and borrowings, less accrued interest, cash and cash equivalents, short-term investments, financial assets related to lease operations (deposits, guarantees and cash collateral), and the fair value of currency hedge derivative instruments on debt securities and lease deposits. The liabilities relating to lease financing for tramways T3, T5, T6, T7 and T8 are offset in the measurement of net debt by the receivable of the same amount from the Île-de-France transport authority and therefore does not appear in the list below.

	31/12/2016	31/12/2015
Financial liabilities	7,681,390	7,669,670
Cash flow hedging instruments	(289,690)	(344,005)
Fair value derivative instruments on options	(18,608)	21,714
Accrued interest	(68,107)	(67,880)
Advance on housing loan (CIL)	(32,638)	(38,038)
Deposits and guarantees ⁽¹⁾	(328,241)	(401,365)
Other financial assets relating to leases	(97,055)	(134,295)
Short-term investments	(42,167)	
Cash and cash equivalents	(1,020,413)	(1,051,687)
Other ⁽²⁾	(345,394)	(375,927)
NET DEBT	5,439,077	5,278,188

(1) The terms of these deposits match the maturities of the loans relating to lease terminations. They are deducted when calculating net debt.

(2) Including cash flow hedge guarantee deposits of €342 million as at 31 December 2016.

26.4 MATURITIES OF LOANS AND BORROWINGS

In thousands of euros	2017	2018	2019	2020	2021	>5 years
Bond issues (EUR)	–	650,000	–	–	600,000	3,100,000
Interest on bond issues (EUR)	134,156	134,156	104,906	104,906	104,906	300,129
Bonds denominated in foreign currencies	277,464	–	297,163	–	–	–
Interest on bonds denominated in foreign currencies	24,919	12,139	12,139	–	–	–
Île-de-France loans	20,414	20,309	18,509	16,845	15,943	136,042
Interest on Île-de-France loans	–	–	–	–	–	–
Corporate savings plan loans	199,075	–	–	–	–	–
Interest on corporate savings plan loans	1,706	–	–	–	–	–
Borrowings from credit institutions	51,222	49,564	10,353	10,353	10,353	54,437
Loans related to lease terminations	51,045	269,566	–	14,040	–	30,552
Interest on loans related lease terminations	886	953	1,024	1,099	1,180	12,061
Loans related to finance leases	4,458	3,794	3,159	2,996	3,023	21,209
Interest on loans related to finance leases	480	379	317	270	221	548
Deposits and guarantees received	189,300	–	–	–	–	–
Commercial paper	1,100,066	–	–	–	–	–
Other loans and borrowings	23	–	–	–	–	–
Bank loans	158,596	–	–	–	–	–
Accrued interest	68,107	–	–	–	–	–
TOTAL LOANS AND BORROWINGS	2,281,917	1,140,859	447,569	150,509	735,625	3,654,978

Cash flows relating to bond issues in Swiss francs are hedged by cross currency swaps.

The breakdown by main currency and type of interest rate is presented in Note 29.

26.5 CHANGE IN AMORTISED COST

Bond issue	Amortised cost 31/12/2016	Amortised cost 31/12/2015	Change
RATP CHF 3.375% 21 March 2016	0	184,585	(184,585)
RATP CHF 3.25% 9 October 2017	279,338	276,841	2,497
RATP CHF 3.25% 6 November 2017	139,704	138,498	1,206
RATP EUR 4.50% 28 May 2018	649,462	649,105	358
RATP CHF 2.929% 27 June 2019	139,587	138,316	1,271
RATP CHF 2.625% 6 November 2019	293,093	290,420	2,673
RATP EUR 4.00% 23 September 2021	597,416	596,826	590
RATP EUR 2.875% 9 September 2022	596,251	595,063	1,188
RATP EUR 4.125% 13 April 2023	597,774	597,426	348
RATP EUR 1.38% 16 September 2024	149,953	149,936	17
RATP EUR 0.375% 15 June 2024	495,756	0	495,756
RATP EUR 2.441% 25 October 2025	49,796	49,775	21
RATP EUR 3.03% 25 October 2025	199,702	199,673	29
RATP EUR 3.75% 19 October 2026	447,935	447,763	172
RATP EUR 4.11% 1 July 2031	49,760	49,747	14
RATP EUR 1.75% 25 May 2031	497,950	497,824	126
TOTAL – BONDS	5,183,478	4,861,798	321,680

	Amortised cost 31/12/2016	Amortised cost 31/12/2015	Change
Île-de-France loans	199,936	221,192	(21,256)
Advance on housing loan (CIL)	32,638	38,038	(5,400)
Corporate savings plan loan (excluding commercial paper)	199,075	209,213	(10,138)
Loans relating to lease terminations	328,241	401,365	(73,124)
TOTAL LONG-TERM BORROWINGS	5,943,368	5,731,606	211,762

27 Accounts payable

Accounts payable (excluding pre-paid income) are financial liabilities valued at their fair value which is equal to their nominal value when entered in the balance sheet as the effect of discounting is not material for liabilities that are due within a year.

	31/12/2016	31/12/2015
Trade payables	316,892	293,014
Payables on fixed assets	448,088	381,482
Taxes and payroll-related payables	730,855	691,680
Other operating payables	28,793	17,385
Prepaid income	70,690	74,324
Other payables	571,412	591,728
Income tax liabilities	1,296	6,815
TOTAL	2,168,024	2,056,427

All trade payables are due within one year.

28 Change in working capital

	31/12/2016	31/12/2015
Inventories	(9,880)	(17,998)
Advances and down payments to suppliers	915	41,135
Trade receivables and related accounts	(26,200)	(28,201)
Receivables from the State and other public authorities	(151,443)	(8,433)
Receivables from the Île-de-France transport authority	18,210	(23,200)
Other receivables	2,512	25,778
Prepaid expenses	(311)	(1,006)
Advances and downpayments received	16,786	(11,031)
Trade and related payables	21,899	(9,483)
Taxes and payroll-related payables	78,447	(11,161)
Amounts due to the Île-de-France transport authority	(39,870)	39,923
Other liabilities	(25,987)	(15,990)
Prepaid income	1,800	(1,611)
Lease prepayments	(1,357)	(1,868)
TOTAL CHANGE IN WORKING CAPITAL	(114,478)	(23,146)

29 Management of financial risk

MANAGEMENT OF INTEREST RATE RISK

RATP group's debt bears mostly fixed-rate interest. Interest rate risk on financial assets or liabilities is managed by setting up fair value hedges (swaps, caps, floors) to strictly back an existing or highly probable debt.

FOREIGN CURRENCY HEDGES

RATP systematically hedges exchange rate risk on foreign currency loans using swaps (foreign exchange swaps, cross currency swaps or flow swaps).

MANAGEMENT OF RISK OF COMMODITY PRICE INCREASES

The Group may use commodity derivatives. RATP generally provides back-to-back guarantees to its subsidiaries for such transactions.

CREDIT AND COUNTERPARTY RISK

Credit risk is the risk of financial loss for the Group if a customer or counterparty to a financial instrument defaults on their contract commitments.

Risk concerning customers is limited as the Group's main customers are local authorities.

Counterparty risk is also limited due to collateral agreements on derivatives and the diversification of the short-term investment portfolio, which solely comprises cash equivalents.

LIQUIDITY RISK

Liquidity risk is the risk that RATP group may not be able to repay its debts when they fall due. RATP principally uses long-term financing arrangements. RATP has also issued a maximum of €2,500 million in commercial paper and has average available outstanding investments of an average €1 billion for 2016 to ensure adequate liquidity.

29.1 SENSITIVITY TO SHORT-TERM DEBT

As at 31 December 2016, RATP had short-term debt instruments in the form of commercial paper amounting to €1,100 million, of which €127 million was backed by the corporate savings plan. The debt instruments have maturities of up to six months, and have been issued at a fixed interest rate.

RATP also has short-term fixed rate bonds (€127 million) for financing the Tick'épargne fund as part of the corporate savings plan.

The short-term debt being primarily at a fixed rate, the Group is not highly exposed to interest rate volatility.

29.2 SENSITIVITY TO LONG-TERM DEBT

EFFECT ON INTEREST EXPENSE

Today, 93% of long-term borrowings (bonds, corporate savings plan, Île-de-France loan) bear fixed rate interest.

Total unhedged debt	31/12/2016	31/12/2015
CHF bonds (in millions of euros)	852	1,028
Floating rate	0%	0%
Fixed rate	100%	100%
EUR bonds (in millions of euros)	4,332	3,833
Floating rate	0%	0%
Fixed rate	100%	100%
Île-de-France long-term bonds (in millions of euros)	200	221
Floating rate	100%	100%
Fixed rate	0%	0%
Corporate savings plan (in millions of euros)	199	209
Floating rate	100%	100%
Fixed rate	0%	0%
Total (in millions of euros)	5,583	5,291
Fixed rate	93%	92%
Floating rate	7%	8%

Total hedged debt

	31/12/2016	31/12/2015
Total debt (nominal amount) (in millions of euros)	5,583	5,291
Floating rate	399	430
% fixed-rate debt	93%	92%

Interest expense on bonds amounted to €159.7 million in 2016: as all the bonds bear interest at fixed rates, they are not exposed to the risk of increases in interest rate.

29.3 OFFSETTING AGREEMENTS

The Group's financial assets and liabilities are not offset in the balance sheet, except for assets and liabilities relating to the American lease (see Note 13).

However, the Group has entered into offsetting agreements for some derivative instruments. If either party defaults, the agreements make it possible to offset the fair value of the derivative instruments against the financial collateral.

The following table presents the potential impact of the offsetting agreements:

In thousands of euros	Carrying amount of derivatives assets	Carrying amount of derivatives liabilities	Fair value of financial collateral	Net exposure
Interest rate derivatives	191,473	40,885	157,600	(7,012)
Loans relating to lease terminations		328,239	310,500	17,739

HEDGE EFFECTIVENESS

Forward-looking tests are used to simulate hedge effectiveness in the event of major changes in interest rates (stress scenarios).

Hedges are only considered to be effective if, in all the scenarios tested, they remain within the limits of 80% to 125%. In the event of a 1% increase or decrease in interest rates, all the hedges remain effective.

30 Derivative financial instruments

The Group uses interest rate derivative instruments, currency derivatives or commodity derivatives (fuel) to manage its exposure to interest rate, exchange rate and diesel price escalation risk.

These instruments are only used for risk management purposes. These risks are managed according to objectives set by the Group's Finance Department.

RECOGNITION OF DERIVATIVE FINANCIAL INSTRUMENTS IN THE BALANCE SHEET

Derivative financial instruments are recognised in the balance sheet under financial assets and liabilities.

Derivative instruments are measured at their fair value when initially recognised, then subsequently remeasured at each reporting date until maturity. At each reporting date, the fair value of the derivative financial instruments is calculated on the basis of market values using the valuation models and methods commonly used on the markets or using external valuations provided by counterparties (Note 31).

The method of accounting for derivative financial instruments varies according to whether they are designated as fair value hedges, cash flow hedges or are not qualified as hedging instruments.

HEDGING INSTRUMENTS

For hedging transactions, the Group applies the following arrangements: derivative financial instruments are recorded in the balance sheet at their fair value at the reporting date, based on their hedge classification.

Fair value hedges

A fair value hedge is a hedge of the exposure to a change in the fair value of a recognised asset or liability, or of an unrecognised firm commitment.

The hedged item and the hedging instrument are remeasured, and changes in their fair values are recorded immediately in profit or loss. The net effect of the ineffective portion of the hedge is recognised immediately in the income statement.

Cash flow hedges

A cash flow hedge is a hedge of the exposure to a highly probable forecast transaction that is not recorded in the balance sheet.

Changes in the fair value of the effective portion of the derivative instrument are recognised under other comprehensive income (cash flow hedge reserves) and are transferred to the income statement as the hedged transaction is settled. Changes in the fair value of the ineffective portion are recognised immediately in the income statement.

Effectiveness tests are performed when the hedges are set up and then subsequently at each reporting date. Hedge accounting can no longer apply if effectiveness tests show that the limits set by IAS 39 (80%-125%) are no longer respected. If this is the case, the derivative instrument is no longer classified as a hedging instrument.

DERIVATIVES NOT CLASSIFIED AS HEDGES

Although they are part of the Group's hedging policy, some transactions do not qualify as hedging operations as they do not meet the criteria. These are essentially hedges of intra-group transactions in foreign currencies.

Any changes in fair value of these derivative financial instruments are immediately recorded in the income statement.

30.1 CLASSIFICATION OF DERIVATIVE FINANCIAL INSTRUMENTS

	31/12/2015					
	Non-current assets	Current assets	Total assets	Non-current liabilities	Current liabilities	Total liabilities
Cash flow hedge	284,153	73,746	357,899	12,394	20,557	32,951
Fair value hedge	0	14,578	14,578	36,258	35	36,293
No hedging	0	0	0	0	10,696	10,696
TOTAL	284,153	88,324	372,477	48,652	31,288	79,940

	31/12/2016					
	Non-current assets	Current assets	Total assets	Non-current liabilities	Current liabilities	Total liabilities
Cash flow hedge	144,107	152,882	296,989	11,253	6,081	17,334
Fair value hedge	0	18,642	18,642	40,986	35	41,021
No hedging	0	2,216	2,216	0	602	602
TOTAL	144,107	173,740	317,847	52,239	6,718	58,958

30.2 MATURITY OF DERIVATIVE INSTRUMENTS (MATURITY, NOTIONAL AMOUNT, CURRENCY)

As at 31 December 2015

	Total	Classification			Maturity of notional amount		
		CFH	FVH	Trading	<1 year	1 to 5 years	+5 years
Exchange rate hedges							
Cross currency swaps	938,842	783,922	154,920	–	124,571	627,265	187,006
Foreign exchange swap	802,171	–	802,171	–	802,171	–	–
Interest rate hedges							
Floating for fixed swaps	105,914	105,914	–	–	1,234	15,342	89,338
Commodity hedges							
ULSD 10 ppm swaps	10,237	10,237	–	–	5,032	5,205	–

As at 31 December 2016

	Total	Classification			Maturity of notional amount		
		CFH	FVH	Trading	<1 year	1 to 5 years	+5 years
Exchange rate hedges							
Cross currency swaps	775,028	659,351	115,677	–	325,362	300,008	149,658
Foreign exchange swap	405,997	–	405,997	–	405,997	–	–
Interest rate hedges							
Floating for fixed swaps	85,068	85,068	–	–	204	17,598	67,266
Commodity hedges							
ULSD 10 ppm swaps	17,100	17,100	–	–	8,995	8,105	–

Note: foreign exchange risk on debt issued in foreign currencies is systematically hedged with cross currency swaps. Instruments that do not qualify for hedge accounting under IAS 39 (trading instruments) are nevertheless economic hedges.

30.3 FAIR VALUE HEDGES

Operations classified as fair value hedges on 31 December 2016 are:

- either derivative instruments (cross currency swaps) that cover the deposits negotiated when setting up the American leases and restructured in July 2013;
- or foreign exchange swaps that cover the subscription of commercial papers issued in dollars.

As the sensitivity of these hedging derivatives to fluctuations in interest rates and exchange rates is very similar to those of hedged elements, their impact on profit and loss is not significant.

30.4 CASH FLOW HEDGES

The cash flow hedges in place as at 31 December 2016 comprised:

- either interest rate swaps fixed against Euribor: RATP pays a fixed rate and receives a Euribor rate on its existing floating rate debt, or on highly probable fixed rate debt. As the sensitivity of the swaps is similar to that of the underlying financial liabilities, the impact on profit and loss is not significant;
- or cross currency swaps: the cash flows paid on borrowings in foreign currencies are perfectly hedged by the currency swaps, so that changes in the exchange rate have no effect on profit and loss.

31 Fair value of financial instruments

The fair value of financial assets and liabilities is classified based on the inputs used for measurement, according to the following hierarchy:

- level 1: fair value obtained from quoted prices in active markets;
- level 2: fair value obtained using observable market data (interest rates, exchange rates and associated volatilities);
- level 3: fair value measured using unobservable inputs.

QUOTED PRICES IN ACTIVE MARKETS (LEVEL 1)

Fair value is determined primarily using market data. Marketable securities, including certain UCITS, are classified in this category.

The fair value of bonds carried at amortised cost is disclosed in the Notes. Fair value is determined on the basis of listed market prices at the reporting date.

VALUATION MODELS USING OBSERVABLE MARKET DATA (LEVEL 2)

The assets and liabilities recognised at fair value using level 2 inputs are mainly derivative financial instruments and some dollar deposits maintained by RATP after the early termination of the leases. The fair value of these deposits is determined on the basis of the present

value of estimated cash flows, determined by banks at the reporting date. The fair value of the derivative instruments is determined by external counterparties (banks) using various models:

- the fair value of interest rate swaps is determined on the basis of the present value of estimated future cash flows;
- the fair value of currency swaps is determined on the basis of the present value of estimated cash flows, determined by banks at the reporting date;
- the fair value of interest rate options (swaptions, caps, floors) is determined using the Black & Scholes method.

Credit and counterparty risks (CVA DVA) are taken into account at the fair value of derivative hedging instruments, where there is no collateral agreement (guarantee agreements) between RATP and its counterparty.

The fair value of unlisted financial assets and liabilities carried at amortised cost is disclosed in the Notes. It is determined by discounting cash flows using the market rate taking into account the issuer's credit rating. The interest rates used to discount future cash flows are determined based on the Euribor swap yield curve.

VALUATION MODELS USING UNOBSERVABLE INPUTS (LEVEL 3)

The assets and liabilities measured at fair value using level 3 inputs are mainly available-for-sale financial assets.

31.1 FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

2015

	Carrying amount	Fair value hierarchy			
		Fair value	Level 1	Level 2	Level 3
Measurement of assets to fair value					
Available-for-sale financial assets	39,147	39,147	0	0	39,147
Derivative financial instruments	372,477	372,477	0	372,477	0
Financial concession assets	4,214,986	4,214,986	0	4,214,986	0
Other financial assets	974,430	1,009,181	378,800	630,381	0
Cash and cash equivalents	1,051,687	1,051,687	562,960	488,727	0
Assets held for sale	0	0			
Measurement of liabilities to fair value					
Financial liabilities	7,669,670	7,840,978	5,550,157	2,290,821	0
Derivative financial instruments	79,940	79,940	0	79,940	0

2016

	Carrying amount	Fair value	Fair value hierarchy		
			Level 1	Level 2	Level 3
Measurement of assets to fair value					
Available-for-sale financial assets	35,399	35,399	0	0	35,399
Derivative financial instruments	317,847	317,847	0	317,847	0
Financial concession assets	4,177,458	4,177,458	0	4,177,458	0
Other financial assets	903,120	930,937	384,367	546,570	0
Cash and cash equivalents	1,020,413	1,020,413	646,730	373,683	0
Assets held for sale	0	0			
Measurement of liabilities to fair value					
Financial liabilities	7,681,390	8,409,789	5,871,216	2,538,573	0
Derivative financial instruments	58,958	58,958	0	58,958	0

31.2 MEASUREMENT METHODS AND MAIN UNOBSERVABLE INPUTS

The table below presents the measurement techniques used to measure levels 2 and 3 fair value of the main financial instruments, as well as the main unobservable inputs used:

Types of financial instruments	Measurement method	Main unobservable inputs	Correlation between inputs and measurement to fair value
Derivative financial instruments (interest rate swaps, cross currency swaps)	Discounting of future cash flows	Discount rate	The estimated fair value would increase if the discount rate was lower, and decrease if the discount rate was higher.
Financial assets (deposits, CIL housing loans)	Discounting of future cash flows	Discount rate	The estimated fair value would increase if the discount rate was lower, and decrease if the discount rate was higher.
Loans and borrowings (private equity)	Discounting of future cash flows	Discount rate	The estimated fair value would increase if the discount rate was lower, and decrease if the discount rate was higher.

31.3 TRANSFERS BETWEEN LEVELS OF THE FAIR VALUE HIERARCHY

During the financial year, there were no transfers between levels 1 and 2 of the fair value hierarchy, or to or from level 3. Changes in “available-for-sale financial assets” over the financial year were not affected by changes in fair value.

32 Information per operating segment

In accordance with the provisions of IFRS 8, the segments presented are as follows:

- the “Infrastructure management” segment for the metro and RER under RATP: this activity entails managing the network infrastructure used to provide public passenger transport services, as entrusted to RATP by the ORTF law No. 2009-1503 of 8 December, 2009;
- the “Transport operations” (TO) segment: this activity entails operating public passenger transport services. This segment brings together the transport activities carried out by RATP in the Île-de-France region, and by its subsidiaries in France and abroad. The

parent company’s support functions are included in the scope of this segment, including those provided for infrastructure management, which are subject to internal transfer agreements.

Both segments are regularly reviewed by the Chief Operating Officer in order to allocate resources among the different segments and assess performance pursuant to the Île-de-France transport authority agreement.

The accounting methods used for segment reporting are the same as those used to prepare the consolidated financial statements.

The key principle for preparing segment information is to directly allocate the various line items or cash flows. When this is not possible, for instance if the line items or cash flows are managed by one activity and have initially been recognised as such, internal transfers between the two activities have been arranged to bill the activities appropriately, in accordance with general practice. The agreements set out the scope of transfers, valuation principles and invoicing arrangements.

On the balance sheet, property, plant and equipment and intangible assets are allocated directly in accordance with the scope defined for each activity. Investment grants are allocated to the assets to which they relate.

32.1 INCOME STATEMENT DISCLOSURES BY OPERATING SEGMENT

As at 31 December 2015

	Infrastructure management	Transport	Eliminations	Total
External revenue	3,496	5,552,859		5,556,355
Inter-segment revenue	776,091	232,094	(1,008,185)	0
Revenue	779,587	5,784,954	(1,008,185)	5,556,355
EBITDA	435,799	518,271		954,070
Operating income	201,565	427,443		629,008
Depreciation/amortisation	(234,315)	(136,640)		(370,955)

As at 31 December 2016

	Infrastructure management	Transport	Eliminations	Total
External revenue	4,123	5,443,644		5,447,767
Inter-segment revenue	833,870	255,631	(1,089,500)	0
Revenue	837,993	5,699,274	(1,089,500)	5,447,767
EBITDA	484,234	301,709		785,943
Operating income	244,507	137,589		382,095
Depreciation/amortisation	(238,562)	(147,531)		(386,093)

32.2 BALANCE SHEET DISCLOSURES BY OPERATING SEGMENT

The main segment indicators relating to the balance sheet presented by RATP group are:

As at 31 December 2015

	Infrastructure management	Transport	Total
Balance sheet			
Property, plant and equipment and intangible assets, net	4,334,989	1,768,235	6,103,224
Investment grants	2,314,588	3,231,350	5,545,938
Property, plant and equipment and intangible asset investments	323,052	799,787	1,122,839
Purchase of concession assets		777,599	777,599
TOTAL ASSETS	4,446,644	10,006,115	14,452,759

As at 31 December 2016

	Infrastructure management	Transport	Total
Balance sheet			
Property, plant and equipment and intangible assets, net	4,516,700	1,958,234	6,474,934
Investment grants	2,349,757	3,732,159	6,081,916
Property, plant and equipment and intangible asset investments	314,854	926,090	1,240,944
Purchase of concession assets		610,105	610,105
TOTAL ASSETS	4,973,254	10,459,647	15,432,901

33 Guarantees

33.1 GUARANTEES GIVEN

	31/12/2016			31/12/2015		
	RATP	Other	Total	RATP	Other	Total
Guarantees	389,381	242,111	631,492	436,678	183,990	620,668
Of which						
• non-profit organisations or others	19,017	242,111	261,128	21,548	183,990	205,538
• employee benefits	162,184		162,184	188,280		188,280
• leasehold transactions	208,180		208,180	226,850		226,850
TOTAL	389,381	242,111	620,668	436,678	183,990	620,668

33.2 GUARANTEES RECEIVED

	31/12/2016			31/12/2015		
	RATP	Other	Total	RATP	Other	Total
Guarantees	365,568	7,565	373,133	323,897	4,361	328,258
of which leasehold transactions	365,568		365,568	323,897		323,897
TOTAL	365,568	7,565	373,133	323,897	4,361	328,258

34 Off-balance sheet commitments

34.1 CAPITAL EXPENDITURE

Capital expenditure contracted at the reporting date but not recorded in the financial statements amounted to €4,937 million at 31 December 2016, compared with €4,549 million at 31 December 2015. These investments are mainly financed through subsidies paid as *per* the progress of the projects and the arrangements governing compensation payable for contracts with the Île-de-France transport authority.

34.2 CONTINGENT ASSETS AND LIABILITIES

A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity, or a present obligation for which it is unlikely that an outflow of resources will be required or for which the obligation amount cannot be measured in a reliable manner. Contingent liabilities are not recognised in the financial statements unless they relate to business combinations. However, disclosure is required in the Notes to the financial statements.

STATE AID PAID BY ÎLE-DE-FRANCE

In 2013, the Île-de-France Region was sentenced by the Administrative court of Paris to recover the investment subsidies paid by public transport operators, to reduce the acquisition price of their buses and coaches. The administrative court has classified these grants as illegal State aid, on the grounds of the failure to report them to the European commission. The Group was informed of this order by a letter from the President of the regional council of Île-de-France dated 24 March 2014, which mentions an estimated subsidy amount of €21.7 million (excluding default interest) granted to the Group's subsidiaries.

The case involved two open proceedings, one before the national court and the other before the European Commission. In both proceedings, the Group submitted its observations. There was no change to these proceedings in 2016.

On 27 November 2015, a judgment of the administrative court of appeal of Paris confirmed the Île-de-France Region's obligation to recover the illegal aid, subject to certain conditions. For instance, the amount to be recovered by the Île-de-France Region must take into account the nature of the subsidised investments and the type of transport activity carried out. This should exclude subsidies for financing buses from the amounts to be repaid as they may not be re-used for non-subsidised services. With regard to these conditions, and in the absence of enforcement orders by the Region, at the closing date the Group was unable to draw up a reliable estimate of the repayment that may be required of it by the Region.

However, the Group shall contest the repayment that it may have to make in accordance with this judgment, and the legitimacy of this

repayment obligation because it deems that it was not the effective recipient of the financial aid, and that it was the Île-de-France transport authority and local authorities that received this financial aid *via* a contractual scheme to reduce the cost of transport services that had been invoiced to them. In particular, the Île-de-France transport authority was able to lower the compensation paid to the transport companies to take into account the lower depreciation costs for the subsidised coaches and buses.

In any case, if repayment of the investment grants received by the Group's subsidiaries was to become effective, it would be offset by the transport authorities, in particular, by the Île-de-France transport authority as beneficiary *in fine* of the public grants originally paid by the Île-de-France Region. Consequently, the Group believes that at this stage its obligation is contingent and the resulting outflow of resources is uncertain.

TAXATION OF ÎLE-DE-FRANCE TRANSPORT AUTHORITY FLAT-RATE CONTRIBUTIONS

RATP contacted the French tax authorities (DLF) on 19 May, 2009, requesting an analysis of the VAT system for contributions paid by the Île-de-France transport authority. No response has been received on the matter to date.

Since 2010, RATP has invoiced the Île-de-France transport authority without VAT in accordance with the analysis presented to the French tax authorities.

In 2015, the French tax authorities initiated a tax audit of RATP for financial years 2012 to 2014. On 5 July 2016, RATP received a reassessment proposal with respect to payroll tax.

The Île-de-France transport authority agreement for the 2012-2015 period clearly states that the Île-de-France transport authority shall cover the financial consequences of not subjecting contributions to VAT. RATP will send a reply challenging this notification and has informed the Île-de-France transport authority about this situation. On 20 December 2016, the Directorate of National and International Audits replied to RATP's comments and at this stage it maintains its notification for €188 million, including €19 million in late payment interest (2012 to 2014). The adversarial proceedings are still pending.

Considering the contractual framework with the Île-de-France transport authority, whatever the final outcome, RATP assumes that the impact on the period before 2016 will not affect net income.

Therefore, no item was recorded in the financial statements for the year ended 31 December 2016.

35 Information on related parties

35.1 TRANSACTIONS WITH RELATED PARTIES

RATP is a public service company that is fully owned by the French State. Consequently, RATP is a related party in the meaning of IAS 24 with all companies controlled by the French State. Despite being exempt from the obligation to submit information about transactions with public entities, the Group submits information on the principal non-current transactions concluded with the State and local authorities.

TRANSACTIONS WITH THE STATE AND LOCAL AUTHORITIES

	31/12/2016	31/12/2015
Île-de-France transport authority contribution	2,114,272	2,155,786
Local council contribution to loss-making services	17,949	18,645
Investment grants called (State, STIF, RIF, other)	810,900	886,693
Île-de-France region loans contracted	–	2,449
Île-de-France region loans repaid	20,993	20,398
State and local authority receivables	574,780	437,230
Île-de-France transport authority receivables	54,400	72,610
State and local authority liabilities	165,770	80,920
Île-de-France transport authority liabilities	12,610	52,480
Île-de-France local authority loans and borrowings	228,064	249,057



TRANSACTIONS WITH SUBSIDIARIES

Transactions with consolidated companies are eliminated; transactions with equity-accounted companies are usual practice for commercial or financial purposes within a group; they are performed on an arm's length basis under normal market conditions.

OTHER TRANSACTIONS WITH PUBLIC SECTOR COMPANIES

These refer to ordinary transactions undertaken in normal market conditions.

35.2 COMPENSATION OF SENIOR EXECUTIVES

The senior executives of RATP group are members of the Executive Committee.

	31/12/2016	31/12/2015
Short-term benefits excluding employer contributions ⁽¹⁾	2,635	2,460

(1) Including gross salaries, bonuses, profit sharing and benefits in kind.
Other benefits were not material.

36 Statutory audit fees

Pursuant to AMF Instruction 2006-10 of 19 December, 2006 and the requirements instituted by article L. 820-3 of the French financial security act (LSF), details of the fees charged for the audit of the consolidated and individual financial statements of the Group are provided below:

	31/12/2016	31/12/2015
KPMG	526	458
Mazars	642	620
Other	667	768
Statutory Audit	1,834	1,846
KPMG	23	51
Mazars	0	0
Other	27	24
Services related to Statutory Audit	50	75
KPMG	18	53
Mazars	0	0
Other	191	680
Other services	209	732

37 Post-balance sheet events

Nil.

38 List of Group companies

Transport division	Country	% control	% interest	Method	Comments
RATP	France	100.00	100.00	FC	Parent company
AlpBus Fournier	France	100.00	100.00	FC	
Autocars du Cambrésis	France	96.17	96.17	FC	
Autocars Finand	France	100.00	100.00	FC	Newly-consolidated
Autocars Finand Parmentier	France	100.00	100.00	FC	Newly-consolidated
Autoline Toscane	Italy	100.00	100.00	FC	
Aventour	France	100.00	100.00	FC	
Bath Bus company	UK	100.00	100.00	FC	
Bombela Operating company	South Africa	51.00	51.00	FC	
Bournemouth Transport	UK	90.00	90.00	FC	
Cambrésis Bus	France	96.17	96.17	FC	
Cars Dunois	France	100.00	100.00	FC	
Cars Perrier	France	100.00	100.00	FC	
Cars Saint Martin	France	88.75	88.75	FC	
Casa Tram	Morocco	100.00	100.00	FC	
Céobus	France	100.00	100.00	FC	
Champagne Mobilités	France	100.00	100.00	FC	
Chemin de Fer Cambrésis	France	96.17	96.17	FC	
Cité Bleue	France	50.00	50.00	EM	Joint venture
CSR	France	100.00	100.00	FC	Newly-consolidated
CTB	France	100.00	100.00	FC	
CTCM	France	100.00	100.00	FC	
CTGMVA	France	100.00	100.00	FC	
CTLB	France	100.00	100.00	FC	
CTPC	France	100.00	100.00	FC	Newly-consolidated
CTPL	France	90.00	90.00	FC	Newly-consolidated
CTVH	France	100.00	100.00	FC	
CTVMI	France	100.00	100.00	FC	
CTY	France	100.00	100.00	FC	
DL Entreprises	France	100.00	100.00	FC	
Dunois Voyages	France	100.00	100.00	FC	
El Djazair	Algeria	100.00	100.00	FC	
EM Services	France	90.00	90.00	FC	
EMS Rennes	France	90.00	90.00	FC	
Escapade	France	54.60	54.60	FC	Newly-consolidated
FlexCité	France	85.60	85.60	FC	
FlexCité 77	France	85.60	85.60	FC	
FlexCité 91	France	85.60	85.60	FC	
FlexCité 92	France	85.60	85.60	FC	
FlexCité 93	France	85.60	85.60	FC	
FlexCité 94	France	97.00	97.00	FC	

Transport division	Country	% control	% interest	Method	Comments
FlexCité 95	France	85.60	85.60	FC	
FlexCité 95 TSE	France	85.60	85.60	FC	
FlexCité TAD	France	100.00	100.00	FC	
Fullington Auto Bus company	USA	75.50	75.50	FC	
Gem'Bus	France	100.00	100.00	FC	
Gest SpA	Italy	100.00	100.00	FC	
H.R. Richmond Ltd	UK	100.00	100.00	FC	
HelvéCIE SA	Switzerland	100.00	100.00	FC	
Hong Kong Tramway	Hong Kong	50.50	50.50	FC	
Hong Kong Tramway Engineering	Hong Kong	50.00	50.00	EM	
Ixxi	France	100.00	100.00	FC	
Ixxi Techside	France	100.00	100.00	FC	Newly-consolidated
Jacquemard et Cie	France	100.00	100.00	FC	
La Ferroviaria Italiana (LFI)	Italy	11.71	11.71	EM	
Latium Cilia	Italy	51.00	51.00	FC	
Lebas Laridant	France	100.00	100.00	FC	
Les Cars Charlot	France	100.00	100.00	FC	Newly-consolidated
London United Busways	UK	100.00	100.00	FC	
London Sovereign	UK	100.00	100.00	FC	
Matem	France	51.00	51.00	FC	
Mc McDonald Transit Associates	USA	83.41	83.41	FC	
Metrolab	France	50.00	50.00	Other	Joint operation integrated in share line by line
Métrolink	UK	100.00	100.00	FC	
Mobicité	France	100.00	100.00	FC	
Moulins Mobilité	France	100.00	100.00	FC	
Mumbai	India	31.50	31.50	EM	
Nanjing Anqing	China	16.27	16.27	EM	
Nanjing Huabei	China	11.47	11.47	EM	
Nanjing JV	China	22.05	22.05	EM	
Navocap	France	100.00	100.00	FC	Newly-consolidated
Odulus	France	35.00	35.00	EM	
Orlyval Service (OVS)	France	99.00	99.00	FC	
Public Transportation company	Saudi Arabia	20.00	20.00	EM	
RATP Dev France Investissement	France	100.00	100.00	FC	
RATP Dev France Services	France	100.00	100.00	FC	
RATP Dev Genova	Italy	100.00	100.00	FC	
RATP Dev Italia	Italy	100.00	100.00	FC	
RATP Dev Manille	Philippines	99.99	99.99	FC	
RATP Dev Middle east	UAE	100.00	100.00	FC	
RATP Dev Saudi Arabia	Saudi Arabia	100.00	100.00	FC	
RATP Dev Suisse	Switzerland	100.00	100.00	FC	
RATP Dev Suisse TP	Switzerland	100.00	100.00	FC	

Transport division	Country	% control	% interest	Method	Comments
RATP Dev UK	UK	100.00	100.00	FC	
RATP Dev USA LLC	USA	100.00	100.00	FC	
RATP Dev	France	100.00	100.00	FC	
RATP do Brasil	Brazil	100.00	100.00	FC	
RATP International	France	100.00	100.00	FC	
RDGS	UK	100.00	100.00	FC	
RDMT – DC	USA	96.68	96.68	FC	
RDMT – Tucson	USA	96.68	96.68	FC	
RDK SAS	France	50.00	50.00	EM	
RDK LLC (Educational City)	Qatar	50.00	50.00	EM	
RDSL – Urban	USA	100.00	100.00	FC	
RDSL – Urban NY	USA	100.00	100.00	FC	
SCI Foncière RD	France	100.00	100.00	FC	
SCI LLI	France	100.00	100.00	FC	
SCI Sofitim	France	50.00	50.00	FC	
Selwyns	UK	100.00	100.00	FC	
Séoul Ligne 9	Korea	36.00	36.00	EM	
Setram	Algeria	49.00	49.00	FC	
Société des lignes touristiques	France	100.00	100.00	FC	
Société des lignes touristiques USA	USA	100.00	100.00	FC	
Société des transports interurbains Allier	France	100.00	100.00	FC	
Société des transports interurbains Centre	France	100.00	100.00	FC	
Société des transports interurbains Haute-Savoie	France	100.00	100.00	FC	
Société des transports urbains de Bourges	France	100.00	100.00	FC	
Société des transports urbains Vierzon	France	100.00	100.00	FC	
Société d'exploitation des lignes touristiques	France	100.00	100.00	FC	
SQY BUS	France	89.52	89.52	FC	
STD de la Marne	France	100.00	100.00	FC	
STILE	France	100.00	100.00	FC	
STIN	France	100.00	100.00	FC	
STIVIMMO	France	50.00	50.00	EM	Joint venture
STIVO	France	50.00	50.00	EM	Joint venture
STS	France	51.00	51.00	FC	
TFT SPA	Italy	11.71	11.71	EM	
TIMBUS	France	50.02	50.02	FC	
TOT The Original Sight Tour Limited	UK	100.00	100.00	FC	
TP2A	France	51.00	51.00	FC	
Tram di Firenze	Italy	24.90	24.90	EM	
Transport Finand	France	100.00	100.00	FC	Newly-consolidated
TVM	France	100.00	100.00	FC	
Veolia Transport RATP Asia	France	50.00	50.00	EM	Joint venture
Vienne Mobilités	France	90.00	90.00	FC	
Voyages Dupas Lebeda	France	100.00	100.00	FC	



Transport division	Country	% control	% interest	Method	Comments
Voyages Taquet	France	100.00	100.00	FC	
VT Korea	Korea	45.00	45.00	EM	
VTCL	China	45.00	45.00	EM	
VTR China	China	50.00	50.00	EM	Joint venture
VTR Consulting	China	50.00	50.00	EM	Joint venture
VTR India	India	50.00	50.00	EM	Joint venture
VTR Korea	Korea	50.00	50.00	EM	Joint venture
Wizway Solution	France	25.00	25.00	EM	Newly-consolidated
Engineering division					
Systra group	France	41.92	41.92	EM	
Real property, marketing & telecoms division					
Naxos	France	100.00	100.00	FC	
Promo Métro	France	100.00	100.00	FC	
SADM	France	100.00	100.00	FC	
SEDP	France	100.00	100.00	FC	
Telcité	France	100.00	100.00	FC	
Telcité NAO	France	100.00	100.00	FC	

FC: full consolidated

EM: equity method

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Statutory Auditor's report

Statutory Auditor's report on the financial statements

Year ended 31 December 2016

In compliance with the assignment entrusted to us by the Commissioner to the French State Holdings Agency, we hereby report to you, for the year ended 31 December 2016 on:

- the audit of the financial statements of RATP, as appended hereto;
- the evidence supporting our opinion;
- the specific verifications required by French law.

The Board of Directors is responsible for preparing the financial statements. It is our duty to express an opinion on these financial statements on the basis of our audit.

1. Opinion on the financial statements

We have conducted our audit in accordance with the professional standards applicable in France. Those standards require that we plan and perform our work to obtain reasonable assurance that the financial statements are free from material misstatement. An audit consists in examining, on a test basis, the evidence supporting the amounts and disclosures in the financial statements. It also consists in assessing the accounting policies adopted and evaluating the significant estimates in the financial statements and the overall presentation thereof. We consider that the elements we have collected are appropriate and sufficient for basing our opinion.

We hereby certify that the financial statements, with regard to French accounting standards, give a true and fair view of the company's asset base, financial position and earnings for the year ended 31 December 2016.

Without qualifying the opinion expressed above, we draw your attention to Note 1 "Highlights of the year" and Note 16 "Corporate tax and tax position" in the notes to the financial statements, which describe the accounting consequences of RATP becoming liable to corporate income tax from 1 January 2016.

2. Evidence supporting our opinions

In accordance with the provisions of article L. 823-9 of the French Commercial Code relating to the justification of our assessments, we draw your attention to the following matters:

- Note 2.1.5 to the financial statements "Impairment of intangible assets and property, plant and equipment" presents the main assumptions used to determine recoverable values and the results of the impairment tests. We have reviewed the methods used to perform these impairment tests, the consistency of the assumptions used and the cash flow forecasts and verified the appropriateness of disclosures thereof;

- Note 2.11 to the financial statements "Long-term employee benefits" describes the long-term employee benefits provisioned in the balance sheet and the method used to measure the obligations. Note 17 to the financial statements "Off-balance sheet financial commitments", in the section "Employee benefits", presents the employee benefit obligations that are not provisioned in the financial statements. We reviewed the manner in which these benefits and provisions had been identified, measured and recognised, and we verified the appropriateness of the disclosures thereof;
- Note 23 to the financial statements "Separate financial statements for Transport operations and Infrastructure management" presents the method used to create the separate financial statements of the Infrastructure management and Transport operations activities. Our work entailed reviewing the methods used to create these separate financial statements and the disclosures thereof;
- As mentioned in the first part of this report, Note 1 "Highlights of the year" and Note 16 "Corporate tax and tax position" in the notes to the financial statements describe the accounting consequences of RATP becoming liable to corporate income tax from 1 January 2016. Our work entailed verifying that the tax reporting requirements had been correctly applied and presented.

The opinions thus expressed are based on our overall audit of the financial statements as a whole, and therefore form the basis for the opinion stated in the first part of this report.

3. Specific verifications and information

We have also carried out the special verifications required by law, in accordance with the professional standards applicable in France.

We have no matters to report regarding the fair presentation and consistency with the financial statements of the information provided in the Board of Directors' management report of RATP.

Paris-La Défense and Courbevoie, 1 April 2017
The Statutory Auditors

KPMG Audit
Department of KPMG SA
Philippe Arnaud
Partner

MAZARS
Lionel Gotlib
Partner

Balance sheet

In thousands of euros	Notes	31/12/2016		31/12/2015	
		Gross	Accumulated depreciation, amortisation and provisions	Net	Net
Intangible assets	3	868,606	445,005	423,601	381,253
Property, plant and equipment	3	27,224,489	11,345,244	15,879,245	15,052,194
Financial assets	4	1,173,486	40,304	1,133,182	1,193,124
Fixed assets		29,266,581	11,830,553	17,436,028	16,626,571
Inventories	5	236,168	50,323	185,845	181,349
Receivables	6	1,613,347	7,994	1,605,353	1,433,086
Marketable securities	7	980,149		980,149	1,006,827
Cash and cash equivalents	7	204,174		204,174	246,476
Current assets		3,033,838	58,317	2,975,521	2,867,738
Loan transaction costs		4,709		4,709	5,781
Bond redemption premiums		13,543		13,543	11,922
Unrealised translation losses		63,595		63,595	65,516
TOTAL ASSETS		32,382,266	11,888,870	20,493,396	19,577,528
	Notes				
Reserve for assets allocated to RATP				250,699	250,699
Revaluation surplus				212,923	215,637
Capital endowment				433,367	433,367
Reserves				294,699	294,699
Retained earnings				2,937,505	2,582,647
Net income for the period				141,121	354,858
Net equity				4,270,314	4,131,907
Tax driven provisions				457,036	376,056
Investment grants				5,962,650	5,446,253
Equity	8			10,690,000	9,954,216
Provisions for contingencies and expenses	9			248,249	234,990
Loans and borrowings	10			7,233,388	7,159,917
Taxes and payroll-related payables				684,348	667,628
Other liabilities	11			1,573,811	1,495,223
Unrealised translation gains				63,600	65,554
TOTAL EQUITY AND LIABILITIES				20,493,396	19,577,528

Income statement

In thousands of euros	Notes	31/12/2016	31/12/2015
Revenue	12	4,652,119	4,738,683
Other income		442,259	405,528
Income used to offset depreciation expenses		224,565	208,374
Operating income		5,318,943	5,352,585
Energy		181,800	191,202
Cost of leased tracks		29,887	29,661
User rights payable		20,983	20,852
Equipment, supplies and other external services		851,381	787,394
Tax, duties and other payables		314,448	237,940
Payroll costs	13	2,541,900	2,587,122
Wages and salaries		1,796,819	1,785,554
Payroll taxes		739,265	765,801
RATP employee benefit plan cost, net		5,815	35,766
Depreciation and amortisation		940,194	908,481
Other expenses		30,445	30,781
Operating income		407,905	559,152
Financial income		112,251	220,378
Financial expenses		270,283	387,011
Net financial expense	14	(158,032)	(166,633)
Ordinary income		249,873	392,519
Non-recurring income		57,322	129,461
Non-recurring expenses		123,631	109,852
Non-recurring income and expense	15	(66,309)	19,609
Profit-sharing		50,311	57,270
Income tax	16	(7,868)	
NET INCOME		141,121	354,858

Notes to the financial statements

Year ended 31 December 2016

Unless otherwise stated, all amounts are presented in thousands of euros.

Régie autonome des transports parisiens (RATP), is a State-owned industrial and commercial public utility (établissement public à caractère industriel et commercial – Epic) created by the law of 21 March, 1948. It is a legal entity under public law, registered in the Paris Trade and Companies Register.

RATP parent company's financial statements are included in the consolidated financial statements of RATP group.

The financial statements as at 31 December 2016 were approved by the Board of Directors at their meeting on 24 March 2017.

1 Highlights of the year

RATP was notified by a letter from the Minister for Finance and Public Accounts dated 3 March 2016 that, as a public institution engaged in gainful activities, it has to pay all taxes and duties to which private undertakings engaged in the same operations would be subject.

The result of this letter is that RATP is subject to corporate income tax and similar taxes (apprenticeship tax [€14.7 million], tax on company vehicles) and that it benefits from a tax credit (including the CICE [€57 million]). RATP also considers that this deadline will lead it to pay payroll tax (€63.9 million) from the financial year beginning on 1 January 2016.

Prior to the entry into taxation on 1 January 2016, RATP therefore revalued the assets and liabilities forming the balance sheet at 31 December 2015 at their market value. This corresponds to the tax value of the assets in the opening balance sheet. The "tax" revaluation surplus resulting from the difference between the reassessed value and the carrying amount of the assets appearing in the opening balance sheet is monitored on a non-accounting basis. It generates a tax depreciation thus used solely for the calculation of income tax.

In the case of equipment grants granted to undertakings by the European Union, the State, public authorities or any other public body and allocated to the creation or acquisition of fixed assets, article 42-f of the French General Tax Code (CGI) provides that these subsidies may be taxed in line with depreciation for the portion of the subsidy allocated to depreciable fixed assets and over a period of ten years for the portion of the subsidy allocated to non-depreciable fixed assets. As RATP was not subject to corporate income tax at the time of grants awarded before 1 January 2016, it was not in a position to opt for the optional scheme under article 42-f of the CGI. As a result, the DLF (Tax Legislation Directorate) considers that the grants awarded to RATP before 1 January 2016 relate to pre-tax years and are therefore not taxable.

RATP's accounts have been drawn up taking into account an amendment to the STIF 2016-2020 contract which is currently being formalised, and which provides for adjustments to the differences related to the transition to corporate tax between the assumptions made in the financial terms of the contract and the application methods recommended by the General Directorate of Public Finance.

The main impacts are presented in Note 16.

2 Principles and accounting policies

RATP applies a customised Chart of Accounts (CoA) as approved by the inter-ministerial order of 21 March, 1985 and the French national accounting board (*Conseil national de la comptabilité*). The customised CoA was prepared in accordance with the rules, principles and framework governing the French national Chart of Accounts.

It includes additional line items reflecting RATP's reporting and disclosure and management requirements and specific characteristics in terms of legal form and financing.

2.1 PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

2.1.1 OWNERSHIP REGIME GOVERNING ASSETS CAPITALISED BY RATP

As of 1 January, 2010, the French law on public passenger services by rail (hereinafter "the ORTF law") amended the ownership regime governing assets originally allocated to RATP or created by RATP by defining four asset categories:

- infrastructure assets, which are managed and owned by RATP;
- rolling stock and the related maintenance equipment (returnable assets), which have been owned by the Île-de-France transport authority since 1 January, 2010. The Île-de-France transport authority will take possession of the assets once the operating rights expire. Implementation decree No. 2011-320 provides for the purchase by the Île-de-France transport authority of these assets from RATP at their carrying amount net of grants, as reported in the RATP's financial statements;
- other assets required for operations (reversionary assets), other than those mentioned in the previous two paragraphs, which are fully owned by RATP. Upon expiry of RATP's operating rights, the Île-de-France transport authority has the right to exercise a right of repossession on these assets;
- real estate and other assets that are not allocated to operations but are used by RATP for administrative, social or training purposes, which are fully owned by RATP.

Assets capitalised by RATP are recognised based on their ownership regime as follows:

Type of assets

	Infrastructure management		Transport operations activity	
	Fully-owned assets	Returnable assets	Reversionary assets	Fully-owned assets
Nature of assets	Infrastructure assets.	Rolling stock and related maintenance equipment.	Assets required for operations: <ul style="list-style-type: none"> • bus stations; • equipment, etc. 	Assets allocated for administrative, social and training purposes.
Ownership regime	RATP owns these assets.	These assets belong to the Île-de-France transport authority as of 1 January, 2010. RATP maintains control over them. The Île-de-France transport authority will take possession of the assets when the agreement expires.	RATP owns these assets. The Île-de-France transport authority holds a right to repossess these assets subject to payment of compensation to RATP upon expiry of the agreement.	RATP owns these assets.
Compensation arrangements during operating period		Article 14 of French decree No. 2011-320 sets forth the arrangements governing the compensation payable by the Île-de-France transport authority to RATP for the assets.	The compensation principles and arrangements apply for the duration of the Île-de-France transport authority agreement 2012-2015.	
Compensation arrangements upon expiry of operating rights	NA	Article 14 of the French decree No. 2011-320 provides for the buyback of the assets at their carrying amount, net of any grants.	The STIF-RATP agreement provides for the repossession of the assets at a value of zero for assets transferred to RATP at 1 January, 2010, or at their carrying amount, net of grants for other assets.	NA

2.1.2 INTANGIBLE ASSETS

Research and development costs associated with assets that are clearly separable, technically feasible and likely to generate future economic benefits are capitalised if they meet the criteria set forth in the generally accepted accounting principles. They are amortised based on the useful lives of the assets to which they relate. All other research and development costs are expensed.

Information systems acquired or developed by the company are capitalised. They comprise the following components:

- development and configuration costs, which are amortised over five to ten years, on the basis of the useful lives of the systems;
- software and equipment purchased to put the system in service, which are amortised over a three-year period.

2.1.3 PROPERTY, PLANT AND EQUIPMENT

RATP's fixed assets and the returnable concession assets provided by the Île-de-France transport authority are recorded at their historical (acquisition or production) cost, with the exception of those in operation at 31 December, 1976, which were revalued pursuant to article 61 of the 1977 French Finance Act.

In accordance with component-based accounting, RATP's fixed assets have been broken down into components and the useful life of each component has been determined based on their replacement or renovation frequency. At 1 January, 2005 RATP adopted the depreciated historical cost method.

Certain assets are funded by investment grants.

Pursuant to CRC regulation No. 2004-06 of the French Accounting Regulations Committee (*Comité de la réglementation comptable*), the costs of dismantling railway rolling stock are provisioned to offset the amount capitalised for the asset components, which are depreciated over the useful lives of the trains.

Provisions for depreciation are calculated using the straight-line method based on the useful lives of the assets, as defined by RATP technicians. The useful lives of property, plant and equipment are reviewed annually if there are significant changes.

Spare parts

Spare parts are recognised as assets and valued at the historical unit cost. Spare parts managed in a computerised maintenance management system (CMMS) are valued at weighted average cost.

Depreciation of spare parts is calculated based on the depreciation schedule for the associated assets.

2.1.4 DEPRECIATION PERIOD

Fixed assets are depreciated on a straight-line basis over their useful lives.

The periods considered for the principal assets are as follows:

Buildings	Useful life
Building shell and brickwork	70 to 100 years
Building fixtures and fittings	6 to 30 years

Railway infrastructure	Useful life
Tunnels, stations and access ways	35 to 140 years
Fittings for stations and access ways	15 to 40 years
Tracks	10 to 50 years
Conductors, traction power supply for the metro system	5 to 50 years
Catenary systems for the regional express network (RER) and trams	15 to 50 years

Track signaling and assisted driving systems	Useful life
Automated train operating system (SAET)	5 to 35 years
Automated driving system	15 to 30 years
Track signaling	10 to 40 years

Rolling stock	Useful life
Rolling stock (rail)	20 to 40 years
Rolling stock (bus)	4 to 10 years
Company cars	5 years

Plant equipment, fixtures and fittings	Useful life
Elevators, escalators and moving walkways	10 to 40 years
Automatic gates, passenger turnstiles	10 to 20 years
Equipment to print, deliver and stamp tickets	5 to 10 years
Telecom equipment and alarms	5 to 15 years
Electrical installations	5 to 30 years
Transformers	10 to 100 years
Ventilation and air evacuation equipment	15 to 30 years
Air conditioning systems	5 to 10 years
Sound and lighting equipment	10 to 30 years
Equipment and tooling	5 to 30 years
Other equipment and furniture	2 to 15 years

2.1.5 IMPAIRMENT OF INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

The accounting principles also provide for impairment testing to assess whether there is any indication that an asset may be impaired. If there is an indication that a non-financial asset may be impaired, an impairment test is performed: the carrying amount of the fixed asset is compared with its fair value, which is defined as the higher of an asset's market value and its value in use.

The ORTF law on public passenger transport has limited the duration of operating rights granted to RATP, set forth ownership regimes and specified what happens to assets upon contract expiry. It has also set out the compensation arrangements for Infrastructure management and line operations in order to ensure that costs are covered and there is a return on capital employed.

The tax clarification carried out as from 1 January 2016 and the draft amendment to the Île-de-France transport authority 2016-2020 contract which is currently being signed, modifying the compensation between the two accounting establishments, led to the implementation of impairment tests for the CGUs (Cash-generating unit) Infrastructure management and Transport operations of RATP. The tests were carried out based on the value of the assets as at 1 January 2016. The allocation of these asset values between Infrastructure management and Transport operations was done according to the legal and regulatory provisions applicable to RATP.

The carrying amount of the assets tested in each CGU includes:

- fixed assets (depreciable property, plant and equipment and amortisable intangible assets) net of grants;
- working capital requirements.

The assumptions used to determine recoverable value were as follows. The recoverable value of the assets corresponds to the value in use, which is determined on the basis of future cash flows net of corporate income tax, which were forecast using the following data:

- 2016-2020: on the basis of the investment plan presented to the Board of Directors of RATP in July 2016 and the amendments in force or in the process of being signed;
- beyond 2020: data and cash flows (including normative cash flows) were determined by estimating the terminal value of the assets tested in accordance with applicable standards.

Beyond 2020, period for Transport operations, investment assumptions specific to rolling stock were accounted for until the return of the reversionary assets to the Île-de-France transport authority.

Terminal values were calculated based on normative cash flows determined at the end of the period specified in the plan and projected to infinity on the basis of a perpetual growth rate corresponding to the long-term estimated inflation rate. Concerning Transport operations, cash flows are projected until the end of the operating rights by estimating corresponding terminal values for each expiry date of the operating rights.

	CGUs	
	Infrastructure management	Transport operations activity
Method for determining the recoverable value	Value in use	Value in use
Discount rate	4.6%	Discount rate specific to the rolling stock: 3.7% Rate for the other fully-owned assets and reversionary assets: 5.3%
Growth rate	2.0%	2.0%

The estimated discount rate (weighted average cost of capital) was determined using the average rates observed for a panel of listed companies with similar activities to RATP. A specific discount rate was adopted for Transport operations rolling stock (returnable assets) given the compensation arrangements for these assets, *i.e.* 3.7%. For other assets used in Transport operations (fully-owned and reversionary assets), a discount rate of 5.3% was applied, in line with the rates used by the panel.

The results of the impairment tests performed resulted in substantial margins for both the Infrastructure management and Transport operations CGUs of €887 million and €594 million, respectively. Consequently, no impairment losses were recognised in the financial statements for the financial year.

2.2 FINANCIAL ASSETS

The gross value of financial assets comprises the purchase price and directly attributable acquisition costs. RATP includes conveyance stamp duties, fees, commissions and other taxes in the acquisition cost.

The net asset value of investments held by RATP is determined based on the net equity of the subsidiary, or for subsidiaries that hold shareholdings themselves, based on the consolidated net equity of the sub-group and on the earnings outlook of the subsidiary or sub-group.

A provision for impairment is recognised, if the net asset value of the investment falls below its carrying amount.

2.3 INVENTORIES

Inventories are stated at the lower of cost (including incidental acquisition costs) and net realisable value. Cost is calculated using the weighted average cost method.

Inventories are written down as required based on their turnover and economic life.

2.4 RECEIVABLES

Receivables are recorded at face value. A provision for impairment equal to the full amount of the receivable is recorded if there is non-collection risk.

2.5 BOND REDEMPTION PREMIUMS

The cost of bond redemption premiums is amortised on a straight-line basis over the term of the bonds. However, if early repayment is decided before the date of the financial statements, related costs are amortised in full.

2.6 EQUITY

The equity contra-account entitled “Reserve for assets allocated to RATP” shown in liabilities essentially reflects the residual value at 1 January, 1949 – when RATP was created – of the assets provided for use by RATP at that time and that remained on the balance sheet at 31 December, 1976.

The revaluation surplus recorded under equity results from the revaluation performed in 1963 on the basis of 1959 data, and the revaluation of non-depreciable assets performed in 1978 on the basis of 1976.

RATP was formed by the act of 21 March, 1948. However, no capital was transferred to it at that time. In 1986, the public authorities allocated capital of €283.3 million to RATP. The amount allocated was increased by €150 million in July 2010 as part of the national recovery plan announced at the start of 2009.

Income from investment grants is recognised based on the depreciation schedule of the associated assets, with the exception of grants received for purchasing land, of which one-tenth is recognised as income per fiscal year.

Tax-driven provisions relate:

- to the revaluation of depreciable assets performed in 1978 based on 1976 data. They are transferred to income in proportion to the depreciation and amortisation recognised for the corresponding assets;
- to special depreciation methods practiced since 1 January 2016.

2.7 LOANS AND BORROWINGS

Loans and borrowings are recorded on the balance sheet at their redemption value in euros.

2.8 CURRENCY TRANSACTIONS

Balances denominated in foreign currencies are converted at the year-end exchange rate, with the exception of loans and borrowings that are fully hedged by currency swaps (cross currency swaps), which are presented at the hedged rate. All currency transactions are fully hedged.

If, at the date of the closing of accounts, the exchange rate impacts the amounts previously recorded in euros, adjustments are recorded under balance sheet liabilities if they reflect unrealised currency translation gains and under assets if they reflect unrealised currency translation losses. If unrealised currency translation losses are recorded, a foreign exchange contingency provision is also recorded.

2.9 DERIVATIVE FINANCIAL INSTRUMENTS

RATP uses derivative financial instruments to manage its exposure to changes in interest rates and exchange rates (interest rate and commodity swaps and options, and cross currency swaps). Almost all the derivative instruments qualify for hedge accounting and are used to manage risk on debt and diesel consumption.

The income and expense arising from the use of hedging instruments is recorded when the profit and loss from the hedged items is collected or incurred.

The difference between the interest receivable and the interest payable on swaps, caps and floors, and the premiums and net payments associated with these transactions are recorded as an adjustment to the interest expense over the term of the instruments.

Unrealised gains and losses arising from hedges on future purchases of diesel fuel (budgeted) are deferred and recognised in the income statement when the hedged transaction is settled. As in 2015, no transactions were undertaken on the commodities markets in 2016.

2.10 TRADE PAYABLES

Prepayments to suppliers are reported under balance sheet assets.

2.11 LONG-TERM EMPLOYEE BENEFITS

RATP recognises provisions for long-term employee obligations including those relating to:

- work-related accidents and illnesses. RATP insures its current employees for work-related illnesses and accidents. The benefits paid compensate employees for the permanent physical or psychological damage incurred due to an accident or illness and any other negative effects on the employee’s career. Only the benefits paid to current employees are classified as long-term benefits: €22 million;
- seniority bonuses (long-service rewards): €27.8 million;
- phased retirement: €0.6 million;
- unemployment benefits: €7.5 million;
- long-term sick-leave: €2.3 million.

Employee benefits are measured using actuarial calculations based on assumptions regarding demographic variables (mortality, employee turnover, etc.) and economic variables (discount rate, salary increase rate, etc.).

The discount rate is based on the Bloomberg fifteen-year rate, which was 1.5% at 31 December 2016, compared to 2.25% at 31 December 2015.

The main actuarial assumptions are as follows:

	31/12/2016	31/12/2015
Discount rate	1.5%	2.25%
Inflation rate	2%	2%
Salary increase rate including inflation	2.2%	2.2%
Mortality table	TGH 05/TGF 05	TGH 05/TGF 05
Turnover rate	0%	0%
Retirement age	See paragraph below	

Retirement age corresponds to the age at which employees leave the company to retire. Assumptions regarding retirement age are defined on an individual basis. They take into account the age at which employees are entitled to retire, the reform of the special pension scheme for RATP employees and the average retirement age per rank, calculated on the basis of retirements recorded over the last twelve months. The individual assumption corresponds to the maximum between the entitlement date and the average retirement age per rank calculated on the basis of retirements.

2.12 LEASES AND LEASE-PURCHASE CONTRACTS

The net present value of lease payments is recorded over the term of the leases. Details of the impact of lease transactions on the financial statements are shown in Note 18.

2.12.1 LEASEHOLD

RATP carries out “leasehold” transactions, granting the rights to use its assets through arrangements that enable foreign investors, particularly in the United States, to assume the economic ownership of the assets and thus amortise the assets and benefit from significant tax breaks.

Leased assets are recorded as fixed assets on RATP’s balance sheet.

A leasehold transaction is composed of the main lease granted by RATP and a sub-lease enabling RATP to retain the right of use of the asset. RATP has an early buyout option (EBO) for a period shorter than the full term of the lease, which enables it to unwind the arrangement by repurchasing the outstanding portion of the lease.

Under French generally-accepted economic and accounting principles, a lease arrangement is not recognised as a sale during the term of the EBO.

The financial gain obtained by the foreign investors is shared with RATP. The overall profit generated from each transaction is included in the down payment received when the contracts are signed. It is immediately used to reduce RATP’s liabilities and is accounted for on a straight-line basis over the term of the lease as non-recurring income.

All associated costs, sub-leases payments, interest and principal are recorded in a single entry under non-recurring income and expense, in accordance with accounting principles on defeasance transactions.

The various contracts that make up each leasehold arrangement constitute separate transactions and are accounted for as such. As the assets and liabilities related to these leases generate cash flows that are fully offset in the balance sheet and income statement, the overall profit generated by each transaction is reported in a single line as the net present value (NPV). The overall profit is recorded as deferred income when the contracts are signed and then is recognised as non-recurring income and expense on a straight-line basis over the duration of the contract.

As at 31 December 2016, there were eight agreements outstanding with two investors – the Bank of America and State Street.

The risks assumed by RATP are limited to equipment ownership risk, risks relating to French legislation and counterparty risk on the deposits. Counterparty risk is managed:

- by defeasance agreements, which enable deposits to be offset against the associated liabilities. The corresponding deposits totaled €163.4 million at 31 December 2016;
- by collateral agreements, which require the deposits to be replaced by American treasury bonds if the credit rating of the deposits falls below a certain threshold. The net amount of the corresponding deposits totaled €44.2 million at 31 December 2016;
- by American treasury bonds: in July 2013, RATP replaced the remaining non-collateralised deposits and their associated letters of credit with American treasury bonds. The deposits totaled €101.2 million at 31 December 2016.

2.12.2 SWEDISH LEASE

The Swedish lease agreement is effective in the period prior to equipment delivery.

The investor pays the supplier the total value of the equipment. At the inception of the contract RATP sets up deposits to cover the lease payments and the equipment buyback option. The difference between the deposits and the value of the material represents the profit made by RATP.

The assets held under the Swedish lease have been recorded as long-term deposits.

The lease payments are recognised as operating expenses and the interest and deposits in financial income. Only the net present value is recorded as non-recurring income. Net income is impacted by the deferred profit relating to the net present value and the theoretical depreciation of assets, if they are maintained on RATP's balance sheet.

2.12.3 FINANCE LEASES IN CONNECTION WITH TRAMWAY DEVELOPMENTS

The Île-de-France transport authority and RATP have set up a finance lease arrangement for rolling stock for the T3E, T5, T6, T7 and T8 tramway lines. In the arrangement, RATP contracts a bank loan as lessee and the Île-de-France transport authority reimburses the associated lease payments. During the construction period, RATP pays the supplier. Once the tramways have been delivered, RATP

transfers them to the bank. The finance lease is then set up. The Île-de-France transport authority will take over the finance lease in 2029.

2.13 RECOGNITION OF REVENUE AND OTHER INCOME

2.13.1 REVENUE GENERATED BY THE AGREEMENT WITH THE ÎLE-DE-FRANCE TRANSPORT AUTHORITY

Transport revenue is made up of three components:

- direct traffic revenue from transport users;
- Île-de-France transport authority contributions:
 - the “C1” contribution to operations and public service obligations. This contribution comprises three parts: a flat-rate contribution covering operating expenses that are not covered by revenue from transport users; a contribution covering the exact amount of business, professional and property-related taxes and duties levied; and a contribution covering the difference between the indexing of the forecast direct revenue based on the methods used to calculate the flat-rate contribution and based on the Île-de-France transport authority's pricing decisions,
 - the “C2” contribution to finance investments (amortisation and interest),
 - a reward or penalty for quality of service, and potential fines if RATP fails to meet its contractual service coverage requirements,
 - a profit-sharing scheme with risks and gains shared between RATP and the Île-de-France transport authority based on the actual direct revenue generated compared with contractual revenue targets,
 - “C4”, a contribution to finance the acquisition of rolling stock for the T3, T5, T6, T7 and T8 tramway lines (reimbursing actual finance lease payments due).

This transport revenue is provided for under the terms of the 2016-2020 multi-annual agreement concluded between the Île-de-France transport authority and RATP. The contributions are revalued every year by applying an indexing formula based on indices, pursuant to the provisions of the Île-de-France transport authority agreement.

Public prices are set by the Île-de-France transport authority, the organising authority. They constitute a public service obligation with which RATP must comply.

2.13.2 INCOME USED TO OFFSET DEPRECIATION EXPENSES

This item reflects income from reversals of investment grants and special revaluation provisions.

2.14 TAXES AND DUTIES

In October 2016, the French tax authorities (DLF) specified the terms of taxation for corporate income tax, in particular regarding the opening tax balance sheet and the depreciation rules for fixed assets.

The main impacts are described in Note 16.

2.14.1 TAX CONSOLIDATION

In 2016, RATP opted for the tax consolidation regime for the French subsidiaries in which it had a stake exceeding 95%, as stipulated in article 223-A of the French General Tax Code.

There are 50 companies in the company's tax consolidation scope. Under the tax consolidation agreements, the subsidiaries bear a tax expense equivalent to that which they would have incurred in the absence of consolidation. The tax consolidation proceeds are acquired by RATP. In accordance with the tax consolidation agreements signed with companies which were previously the parent company of a tax consolidation, for 2016, this income will be partially returned to the consolidated company in such a way that the change in the scope of tax consolidation is neutral for those companies which were parent companies of a tax consolidation before 2016.

2.14.2 TAXATION OF ÎLE-DE-FRANCE TRANSPORT AUTHORITY FLAT-RATE CONTRIBUTIONS 2012 TO 2015

RATP contacted the French tax authorities (DLF) on 19 May, 2009, requesting an analysis of the regime governing VAT on contributions paid by the Île-de-France transport authority. No response has been received on the matter to date.

Since 2010, RATP has invoiced the Île-de-France transport authority without VAT in accordance with the analysis presented to the French tax authorities.

In 2015, the French tax authorities initiated a tax audit of RATP for financial years 2012 to 2014. On 5 July 2016, RATP received a reassessment proposal with respect to payroll tax.

The Île-de-France transport authority agreements for the periods 2012-2015 clearly state that the Île-de-France transport authority shall cover the financial consequences of not subjecting contributions to VAT. RATP has sent a reply challenging this notification and has informed the Île-de-France transport authority about this situation. On 20 December 2016, the Directorate of National and International Audits replied to RATP's comments and at this stage it maintains its notification for €188 million, including €19 million in late payment interest (2012 to 2014). The adversarial proceedings are still pending.

Considering the contractual framework with the Île-de-France transport authority, whatever the final outcome, RATP assumes that the previous impact on the period before 2016 will not affect net income.

Therefore, no item was recorded in the financial statements for the year ended 31 December 2016.

2.15 PAYROLL COSTS

Since 1999, RATP has accounted separately for its transport business and its social security obligations.

This dual accounting system entails:

- for RATP's social security service obligations, income statements for each type of risk covered (health, industrial accidents, unemployment);
- employer social security contributions comparable in level and function with those required in the social security system.

This system as a whole is called the Social Security Accounting System (SSAS).

2.15.1 PRESENTATION OF PAYROLL COSTS IN RATP'S PARENT COMPANY FINANCIAL STATEMENTS

In order to facilitate the understanding and comparison of RATP's income statement with income statements prepared by other transport companies, the payroll costs related to the transport business have been presented in the same way as they are for common law companies, with two separate lines: "Wages and salaries" and "Payroll-related costs". RATP's social security service obligations are reported under the single line item "RATP employee benefit plan cost, net".

French decree No. 2015-1881 of 30 December 2015 relating to the special social security scheme of Régie autonome des transports parisiens was effective from 1 January 2016.

The aim of this decree is to bring the rules governing the special health insurance scheme of the Régie autonome des transports parisiens in line with the new rules resulting from the universal health protection system, both from the point of view of affiliation rules and financing rules.

In addition, it aims to overhaul the financing architecture of the health insurance plan. For RATP, the measure consists in replacing the current mechanism of bilateral compensation with an equilibrium allocation from the National Health Insurance Fund.

With this new mechanism, RATP has to distinguish between the expenses and income that fall under the common law scheme (PUMA) and those that fall under the special scheme.

Regarding the common law scheme, over and above expenses and income, an equilibrium allocation will be paid or received by RATP in order to balance the outcome of the health insurance plan. The amount of this equilibrium allocation will be determined at the end of each year.

Further details on RATP's social security service obligations are provided in the table in Note 13. The social security services are presented in the same way as for other social security entities and show:

- the origin and amount of resources, in particular in terms of employer contributions;
- the amount of benefits paid to plan members;
- the equilibrium allocation under the common law scheme of the health insurance division;
- management costs.

2.15.2 MAIN CHARACTERISTICS OF THE SOCIAL SECURITY ACCOUNTS (SSAS)

Employer contributions

The Social Security accounts are mainly funded by the employer contributions recorded as "Payroll-related costs" in RATP's income statement. In terms of health insurance, as employee contributions have been replaced by the CSG tax paid to URSSAF, RATP receives a contribution to its health insurance fund from the CSG tax collected.

Benefits

Benefits provided by RATP include:

- benefits in kind such as the reimbursement of medical and hospital costs, medical tests and pharmaceuticals, and the services rendered by RATP's healthcare centers (*espace santé*), etc. on the one hand;
- financial benefits, such as wages and salaries paid to employees on sick leave (daily indemnities), lump sums paid upon death, work-related accident and disability pensions, etc. on the other.

Health insurance under the State social security system

RATP has provided health insurance since 1972 under the terms of the State social security system. Until 31 December 2015, as part of its agreement with the State (known as the "bilateral compensation" agreement), RATP pays contributions to the State health insurance funds (CNAM) and the insurance funds reimburse RATP for benefits provided (in kind only). The arrangements and amounts paid by RATP are set forth by decree, and the transfers to RATP are governed by the terms and conditions of the French Social Security Code. From 1 January 2016, the French decree provides for an equilibrium allocation for the common law scheme.

2.16 FRENCH TAX CREDIT ON PAYROLL COSTS (CICE)

The CICE is presented as a reduction in payroll costs. It is calculated according to current regulations.

2.17 NON-RECURRING INCOME AND EXPENSE

RATP recognises items that are material, non-recurring and not part of its normal operations in non-recurring income and expense.

Since 1 January 2016, RATP has applied special depreciation methods to categories of goods for which the tax authorities expressly admit a generally shorter duration of use than the useful life. Depending on the asset categories, the tax depreciation periods used are consistent with the periods defined by tax case law, the OECD report published in 1975, administrative legal theory and professional accounting plans.

3 Property, plant and equipment and intangible assets

Position and changes	Gross value at the beginning of the year	Increase	Transfers between line items	Decrease	Gross value at the end of the year
Headings					
Intangible assets:					
Research and development costs	214,963	0	48	0	215,012
Lease rights	2,626	0	0	0	2,626
Other					
• Software in use	460,648	0	55,480	(237)	515,891
• Software in process	101,955	77,132	(44,010)	0	135,077
TOTAL	780,192	77,132	11,518	(237)	868,606
Property, plant and equipment:					
Land	578,842	0	29,420	(2,900)	605,362
Buildings	10,360,767	0	322,969	(63,783)	10,619,952
Buildings on land not owned	95,272	0	456	0	95,728
Technical plant, equipment and industrial tooling	4,550,136	2,617	257,252	(38,447)	4,771,559
Transport equipment	7,568,889	7,476	739,084	(145,489)	8,169,961
Other	151,348	0	12,172	(2,353)	161,167
Work in progress	2,465,413	1,708,219	(1,372,872)	0	2,800,760
TOTAL	25,770,667	1,718,312	(11,520)	(252,972)	27,224,489

Position and changes	Accumulated depreciation at the beginning of the year	Increases during the year	Decreases during the year	Accumulated depreciation at the end of the year
Headings				
Intangible assets:				
Research and development costs	48,465	7,170	0	55,635
Lease rights	1,464	35	0	1,499
Other	349,010	39,036	(175)	387,871
TOTAL	398,939	46,241	(175)	445,005
Property, plant and equipment:				
Land	10,744	3,313	0	14,057
Buildings	4,210,702	245,355	(13,924)	4,442,133
Buildings on land not owned	88,265	1,166	0	89,431
Technical plant, equipment and industrial tooling	2,802,915	224,589	(28,620)	2,998,884
Transport equipment	3,502,031	316,987	(142,344)	3,676,674
Other	103,817	22,425	(2,175)	124,065
TOTAL	10,718,474	813,835	(187,063)	11,345,244

Amount of depreciation appropriated in the income of the social security service (in thousands of euros)

Software (other intangible assets)	164
Buildings	14
Buildings on land not owned	0
Equipment and industrial tooling	222
Transport equipment	0
Other	20
TOTAL	420

4 Net financial assets

	31/12/2015	Increase	Decrease	31/12/2016
Investments	456,995	10,058		467,053
Receivables from equity investments	124,346	15,137	6,000	133,483
Receivables related to closed lease agreements	468,709	12,790	84,444	397,055
Loans 1%	55,097		6,731	48,366
Swedish lease deposit receivables	51,824		3,796	48,028
Other financial receivables	36,153	3,044		39,197
TOTAL	1,193,124	41,029	100,971	1,133,182

5 Inventories

The gross value of inventories is as follows:

	31/12/2016	31/12/2015
Raw materials and consumables	231,627	222,151
Work in progress	4,541	4,251
Impairment	(50,323)	(45,053)
TOTAL	185,845	181,349

6 Receivables

	31/12/2016					31/12/2015
	Gross amount	Provisions	Net amount	Asset liquidity degree		Net amount
				Maturities		
Receivables				Less than 1 year	More than 1 year	
Advances and down payments to suppliers	407		407	407		677
Trade receivables and related accounts	110,055	4,098	105,957	105,957	0	99,857
Receivables from the State and other public authorities	630,666		630,666	630,666	0	510,248
Other	141,085	3,896	137,189	122,878	14,311	104,240
Lease receivables	675,164		675,164	19,882	655,281	654,895
Prepaid expenses	55,971		55,971	8,789	47,180	63,169
TOTAL	1,613,347	7,994	1,605,353	888,579	716,773	1,433,086

7 Marketable securities and cash and cash equivalents

	31/12/2016	31/12/2015
UCITS	245,736	160,258
Long-term deposit	390,000	465,000
Cash collateral	342,200	378,800
Accrued interest	2,213	2,769
MARKETABLE SECURITIES	980,149	1,006,827

8 Equity

8.1 STATEMENT OF CHANGES

	31/12/2015	Increase	Decrease	31/12/2016
Reserve for assets allocated to RATP	250,699			250,699
Revaluation surplus ⁽¹⁾	215,637		2,714	212,923
Capital endowment	433,367			433,367
Statutory reserves	184,519			184,519
Reserves from sale of real property assets before 1 January, 2010	52,255			52,255
General reserve	57,926			57,925
Retained earnings	2,582,647	354,858		2,937,505
Net income ⁽²⁾	354,858	141,121	354,858	141,121
Equity excluding investment grants	4,131,907	495,979	357,572	4,270,313
Investment grants	5,446,253	810,900	294,503	5,962,650
Regulated provisions ⁽¹⁾	376,056		21,025	457,036
EQUITY	9,954,216	1,306,879	673,100	10,690,000

(1) Details on the revaluation surplus are provided in the note below and mainly concern land and revaluation surplus from 1963 (1959 base).

(2) Net income for 2015 was allocated to retained earnings.

8.2 REVALUATION SURPLUS

8.2.1 REVALUATION IN 1976

Headings	Position and changes					
	31/12/2015		Change		31/12/2016	
	Gross value of assets	Accumulated depreciation, amortisation or provisions	Retired assets	Amortisation and depreciation	Gross value of assets	Accumulated depreciation, amortisation or provisions
Property, plant and equipment						
Land	217,179	10,114	0	2,714	217,179	12,828
Buildings	1,171,279	795,709	(654)	7,794	1,170,625	803,503
Technical plant, equipment and industrial tooling	16,806	16,806	0	0	16,806	16,806
Transport equipment	32,621	32,621	(2,937)	(2,937)	29,684	29,684
Other	506	21	0	0	506	21
	1,438,391	855,271	(3,591)	7,571	1,434,800	862,842
Financial assets						
Equity investments	15	0	0	0	15	0
	15	0	0	0	15	0
TOTAL	1,438,406	855,271	(3,591)	7,571	1,434,815	862,842
					Net exposure:	571,973

8.2.2 REVALUATION IN 1959

The amount of revaluation surplus from 1959 amounted to €8,557 million in 2016.

9 Provisions for contingencies and expenses

Headings	Position and changes					
	Provisions at the beginning of the year	Other reclassification	Increases: additions of the year	Decreases: reversals utilised adjustments		Provisions at the end of the year
Tax driven provisions (revaluation reserve)	376,056	0	0	8,411	37	367,608
Provisions for special depreciation	0		102,005	12,577		89,428
TOTAL 1	376,056	0	102,005	20,987	37	457,036
Provisions for contingencies and expenses						
Provisions for contingencies						
• Provisions for litigation ⁽¹⁾	38,029	0	9,493	2,120	7,491	37,911
• Provisions for work-related accidents	57,653	0	39,683	13,131	9,790	74,415
• Provisions for operating or financial liabilities	5,064	0	782	828	216	4,802
• Other provisions for non-recurring liabilities	168	0	1,464	1,564	0	68
	100,914	0	51,423	17,644	17,497	117,196
Provisions for losses and expenses						
• Provisions for non-recurring expenses ⁽²⁾	134,077	1,807	23,755	28,586	0	131,052
	134,077	1,807	23,755	28,586	0	131,052
TOTAL 2	234,991	1,807	75,178	46,230	17,497	248,248
Provisions for impairment						
Property, plant and equipment	1,605	0	0	127	0	1,477
Financial assets	37,341	0	4,020	8	1,049	40,304
Inventories	45,053	0	5,467	0	196	50,323
Trade receivables and related accounts	1,840	0	3,421	795	368	4,098
Marketable securities	8	0	0	0	8	0
Other	3,496	0	827	398	29	3,896
TOTAL 3	89,343	0	13,735	1,328	1,650	100,098
TOTAL ASSETS	700,390	1,807	190,918	68,545	19,184	805,382

(1) These provisions are for commercial, industrial and employee-related litigation or disputes.

(2) These provisions essentially cover the cost of decommissioning railway rolling stock and long-term employee benefits.

10 Loans and borrowings

Loans and borrowings	Gross amount	Maturities		
		At less than one year	Between 1 and 5 years	More than 5 years
Île-de-France loans	228,064	20,414	86,134	121,515
Bond issue				
• Eurozone financial markets ⁽¹⁾	4,350,000	0	1,250,000	3,100,000
• International financial markets	574,628	181,984	392,644	0
• Tick'épargne loans	199,075	199,075	0	0
Borrowings from and liabilities to financial institutions				
• Borrowings	32,639	3,754	8,410	20,474
• Short-term bank loans	152,249	152,249		
• Postal check	16	16		
Other loans and borrowings	1,589,337	1,339,778	228,478	21,081
Accrued interest	107,381	75,006	32,375	
TOTAL	7,233,388	1,972,276	1,998,041	3,263,070

(1) In June 2016, under its Euro Medium Term Note (EMTN) program, RATP issued new corporate debt securities with a nominal amount of €500 million maturing in June 2024 and bearing interest of 0.375%.

10.1 NET DEBT (EXCLUDING ACCRUED INTEREST)

	31/12/2016	31/12/2015
Financial assets (A)	1,410,385	1,470,783
Loans to subsidiaries ⁽¹⁾	133,300	124,000
Lease deposit receivables	94,975	96,241
Marketable securities ⁽²⁾	635,736	625,266
Cash collateral investment	342,200	378,800
Cash and cash equivalents ⁽²⁾	204,174	246,476
Loans and borrowings (B)	6,793,395	6,652,732
Île-de-France loans	228,063	249,057
Borrowings from financial markets	4,924,627	4,549,199
Tick'épargne loan ⁽³⁾ (bonds and commercial paper)	326,144	389,815
Borrowings from and liabilities to financial institutions	152,265	49,381
Commercial paper	972,996	1,212,180
Collateral	189,300	203,100
NET FINANCIAL DEBT (B - A)	5,383,010	5,181,949

(1) Back to back financing with commercial paper.

(2) Excluding financial assets allocated to lease transactions.

(3) Of which Tick'épargne commercial paper.

10.2 DERIVATIVE INSTRUMENTS

RATP uses financial instruments to manage its exposure to interest rate risk. All financial instruments are used to back both debt and investments.

Consequently, and in accordance with accounting best practices, RATP only records accrued interest on derivatives.

10.2.1 EXPOSURE TO INTEREST RATE RISK

The interest rate risk on borrowings and investments is essentially managed by using swaps and options to modulate the fixed and floating rate portion of the liability (Île-de-France loans), based on changes in interest rates. The modulation is obtained by implementing or canceling interest rate swaps and options.

Swaps at 31 December 2016

Derivatives by maturity

In millions of euros	31/12/2016	31/12/2015
Cross currency swaps on long-term borrowings		
Maturity (1-5 years)	574	699
Interest rate swaps on the finance leases		
Maturity (1-5 years)	32	38
Maturity >5 years	17	18
TOTAL SWAPS IN MILLIONS OF EUROS	623	755

Derivatives by type

In millions of euros	31/12/2016	31/12/2015
A – Swaps on long-term borrowings		
1) Fixed to floating swaps (excluding currency swaps)	0	0
2) Floating to fixed swaps (excluding currency swaps)		
Swaps on short-term interest rates	32	38
Swaps on long-term interest rates	17	18
3) Other swaps		
Cross currency swaps	574	699
B – Swaps on short-term borrowings		0
TOTAL SWAPS IN MILLIONS OF EUROS	623	755

The tables above do not take into account the notional amount of the assets swaps on the 1999 leasehold transaction for which there is no interest rate risk.

The breakdown of bonds and commercial paper at 31 December 2016 (in millions of euros), excluding those relating to the corporate savings plan:

Excluding derivatives		Including derivatives	
Bonds	4,925	Bonds	4,925
At fixed rate	4,925	At fixed rate	4,925
At floating rate	0	At floating rate	0
Commercial paper	973	Commercial paper	973
At fixed rate	973	At fixed rate	973
At floating rate	0	At floating rate	0

Hedging transactions at the end of December 2016 generated a financial expense of –€3 million and relate to deferred recognition of net cash payments and premiums.

Sensitivity of the floating rate financial liabilities at 31 December 2016

There is no short-term sensitivity. The outstanding amount in commercial paper is €973 million, excluding the corporate savings plan. It is invested in money market UCITS investments, marketable debt securities and security deposits.

Valuation of the portfolio of derivative financial instruments

The fair value of derivative financial instruments corresponds to the amounts that would have to be paid (–) or received (+) to unwind the instruments. The fair values of derivatives have been determined based on prices quoted by banks and financial institutions.

	Market value at 31/12/2016 (in millions of euros)
Foreign exchange swap	+18.6
Swaps (excluding currency swaps)	(11.0)
Cross currency swaps	+291.8
TOTAL	299.4

NB: The exchange rate part of the cross currency swaps is offset by the exchange rate part of the underlying bonds. RATP is not exposed to exchange rate risk.

These instruments are not reported on the balance sheet.

10.2.2 EXPOSURE TO EXCHANGE RATE RISK

RATP issues loans in foreign currencies. The resulting exposure to exchange rate risk is systematically hedged using cross currency swaps.

The table below shows the currency derivative instrument positions at 31 December 2016 with regard to the hedged currency debt.

Debt issued		Currency swaps			
		Pay		Receive	
Amount of foreign currency (in thousands)	Currency	Amount of foreign currency (in thousands)	Currency	Amount of foreign currency (in thousands)	Currency
915	CHF	915	CHF	575	EUR

10.2.3 EXPOSURE TO RISK OF COMMODITY PRICE INCREASES

RATP hedges increases in commodity prices for diesel against the risk of price increases and/or therefore against any rise of the dollar against the euro.

RATP carries out commodity hedges (diesel) for its subsidiaries; as at 31 December 2016, this position amounted to €17,100,000.

11 Other liabilities

Accounts payable	Gross amount	Maturities		
		At less than one year	Between 1 and 5 years	More than 5 years
Advances and downpayments received	941	941		
Trade and related payables	242,513	242,513	0	0
Payables for assets and related accounts	441,211	441,211	0	0
Other liabilities	157,392	86,350	71,042	0
Lease payables	680,259	22,801	420,601	236,856
Prepaid income	51,496	22,760	15,520	13,216
TOTAL	1,573,811	816,576	507,163	250,073

12 Revenue

12.1 BREAKDOWN OF REVENUE

	31/12/2016	31/12/2015
Transport revenue (excluding Orlyval)	2,183,493	2,204,480
Bandwidth (risks shared with Île-de-France transport authority – STIF)	8,636	27,546
RATP direct revenue	2,192,129	2,232,026
Service quality bonus	10,245	10,296
Bus bonus after deductible	1,000	–
C11 – contribution to operating expenses	1,094,219	1,127,254
C12 – contribution to taxes and duties	111,160	123,360
C13 – contribution to difference between revenue index under C11 and pricing decisions	(28,266)	(67,699)
C2 – contribution to financing of investments	914,855	956,225
C4 – specific contribution to financing of rolling stock	10,534	8,692
Other transport revenue	46,177	42,436
Penalties (services + validation + incentives)	(9,642)	(11,262)
1. Transport revenue excluding VAT	4,342,411	4,421,328
2. Transport-related revenue excluding VAT	140,196	140,447
of which penalties and fines	24,772	28,212
3. Other service revenue & sales of residual products	169,513	176,908
REVENUE	4,652,119	4,738,683

12.2 TRANSPORT REVENUE EXCLUDING VAT ALLOCATED BY TICKET TYPE

	31/12/2016 VAT included	In %	31/12/2015 VAT included
RATP networks: metro, RER and bus	2,401,843	100	2,424,928
Weekly, monthly and annual Navigo travel passes	1,512,793	62.98	1,442,212
Other subscriptions (police, émeraude, améthyste)	104,027	4.33	108,980
Tickets	705,446	29.37	770,480
Flat-rate travel cards (Mobilis, youth tickets, travel passes for conference goers)	27,451	1.14	32,814
Unsubsidised tickets (Paris Visite, Orlybus, Roissybus)	52,126	2.17	68,943
Weekly travel passes, subsidised school passes, fire service passes and night buses (Noctilien)	0	(0.01)	1,499
ALL NETWORKS	2,401,843		2,424,928

13 Payroll costs

13.1 RATP SOCIAL SECURITY INCOME STATEMENT

	Net income 2016	Health insurance plan	Net income 2015
Health insurance plan			
Standardised employer contributions – PUMA	178,327	Transfers received from CSG tax collected (ACOSS) and employee contributions	124,630
Transfers received from CSG tax collected (ACOSS) and employee contributions	103,083	CNSA contribution (for disabled transport users) excluding PUMA	1,634
Third-party recovery	1,177	Benefits in kind	(259,869)
Healthcare expenses including PUMA healthcare centers (<i>espace santé</i> PUMA)	(276,422)		–
Overheads – PUMA	(10,900)	Cash benefits (paid sick leave, death benefits) – excluding PUMA	(66,400)
PUMA equilibrium allocation	4,735	Healthcare services	(10,794)
RATP social welfare contributions – Health insurance excluding PUMA	77,436	Special scheme expenses	(1,606)
Other contributions and transfers received excluding PUMA	1,728	Management expense (net)	(15,706)
CNSA contribution (for disabled transport users) excluding PUMA	1,798	Bilateral compensation with state health insurance fund (CNAM)	–
Cash benefits excluding PUMA	(71,813)	Contributions paid to special scheme	(298,900)
Special scheme expenses	(6,778)	Allowance for management expenses	11,824
Overheads excluding PUMA	(4,410)	Reimbursement of benefits in kind from the national social security scheme	258,963
NET SURPLUS (DEFICIT) OF THE HEALTH INSURANCE PLAN	(2,041)	NET SURPLUS (DEFICIT) OF THE HEALTH INSURANCE PLAN	(29,196)
Work-related accident insurance plan			
Employer contributions	36,863		33,755
Special scheme contributions (including contr. to the industrial accidents fund)	(38)		(774)
Benefits in kind and allowance for industrial accidents (AT)	(16,801)		(15,475)
Cash benefits and paid leave	(17,385)		(17,624)
Management expense (net)	(4,106)		(4,239)
NET SURPLUS (DEFICIT) OF INDUSTRIAL ACCIDENTS INSURANCE PLAN	(1,467)		(4,356)
Unemployment allowance plan			
Employer contributions	9,360		7,492
Benefits	(11,259)		(9,118)
Management expense (net)	(408)		(587)
NET SURPLUS (DEFICIT) OF THE UNEMPLOYMENT ALLOWANCE PLAN	(2,308)		(2,213)
RATP SOCIAL SECURITY NET SURPLUS (DEFICIT)	(5,816)		(35,766)

13.2 AVERAGE NUMBER OF EMPLOYEES PAID BY THE COMPANY DURING THE YEAR

	31/12/2016	31/12/2015	Changes	
			In number	In %
Average number of employees	43,981	43,500	481	1.1
Breakdown by category:				
– Executives + managers	11,353	11,319	34	0.3
– Operators	32,628	32,181	447	1.4
Breakdown by contract:				
– Permanent	41,674	41,559	115	0.3
– Fixed-term contract	2,307	1,941	366	18.9

13.3 COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS DURING THE YEAR

In thousands of euros	2016	2015
Members of the Board of Directors	10	14
Compensation of the 10 highest-paid executives	2,509	2,538

14 Income statement

	31/12/2016	31/12/2015
Net finance costs	(168,198)	(189,105)
Dividends	10,655	11,215
Other financial expenses	(41,541)	(62,442)
Other financial income	41,052	73,699
TOTAL	(158,032)	(166,633)

15 Non-recurring income and expense

	31/12/2016	31/12/2015
Special depreciation net of grants	(70,914)	
Loss on disposal and retirement of assets	(4,331)	15,388
Partial asset contribution	–	30,359
Non-recurring payment to the Île-de-France transport authority ⁽¹⁾	–	(40,000)
Asbestos-related disease		(999)
Proceeds from financial engineering ⁽²⁾	834	2,015
Indemnities received	7,557	5,456
Transfer to income of property grants (1/10 th)	5,684	3,825
Change in allocation of asbestos removal expenditures	–	3,800
Provisions for restoration of leased sites	(3,968)	
Miscellaneous	(1,171)	(235)
TOTAL	(66,309)	19,609

(1) When closing the STIF-RATP 2012-2015 agreement, and given the non-recurring income and expense figures, particularly in terms of real property transactions carried out by RATP in 2015, an amendment to this agreement was concluded between the Île-de-France transport authority and RATP, which required RATP to pay a portion of this income (€40 million) to the Île-de-France transport authority.

(2) See table 18.

16 Income tax and tax position

16.1 CORPORATE INCOME TAX

In accordance with current tax practices, RATP carried out a revaluation of its assets and liabilities in order to present an opening balance sheet at 1 January 2016. This revaluation took the gross value of the balance sheet assets to €28,098 million, versus a carrying amount of €19,577 million. The revaluation surplus of €8,521 million will be monitored on a non-accounting basis and will generate additional deductible tax depreciation every year.

The grants allocated to the income statement relating to grants called before 1 January 2016, *i.e.* €5,446 million, are considered to be non-taxable. The rate of grants will be identical to that of the tax depreciation recorded.

Reversals in existing asset and liability provisions at 1 January 2016 will be treated fiscally without deviating from common law. A provision that would have been tax deductible will be taxed at the time of its reversal and vice versa.

RATP's tax expense can be explained as follows:

	31/12/2016
RATP's tax expense	0
Net tax consolidation proceeds	6,311
Tax credit	1,556
Other	
TOTAL	7,867

16.2 DEFERRED TAXES

Deferred taxes are not recognised in the parent company financial statements.

The principal deferred taxes are:

In millions of euros	Base 01/01/2016 Deferred tax assets	Deferred tax assets 01/01/2016	Base 31/12/2016 Deferred tax assets	Deferred tax assets 31/12/2016
Remeasuring assets	7,762	2,672	7,444	2,563
Non-taxable grants	5,446	1,856	5,171	1,780
Other temporary differences	353	122	423	146

In millions of euros	Base 01/01/2016 Deferred tax liabilities	Deferred tax liabilities 01/01/2016	Base 31/12/2016 Deferred tax liabilities	Deferred tax liabilities 31/12/2016
Temporary differences	160	55	168	58

The amount related to the fiscal deficit for the year amounts to €270 million (provisional result).

Within the tax consolidation group, the amount related to fiscal deficits for the year amounts to €255 million (provisional amount).

17 Off-balance sheet financial commitments

Commitments given	31/12/2016	31/12/2015
1. Subsidiaries and equity investments		
Guarantee for Logis-Transports	737	858
Counter-guarantee granted to RATP Dev	0	20,000
RATP Dev commodity hedges	17,180	10,237
2. Not-for-profit entities		
Guarantee for IAPR	0	140
RATP Foundation	1,100	550
3. Employee benefits		
Employee loans: guarantee for SBE	686	1,038
Employees: "Low income housing" guarantees	161,498	187,242
Retirement benefits	234,424	213,600
Death indemnities for current employees	16,270	15,082
Death indemnities for retirees	41,526	37,590
Work-related accident and disability allowance for retirees and those with vested rights	296,447	244,625
Early retirement (benefits)	3,253	2,361
4. Financial transactions		
Cross currency swaps on bonds ⁽¹⁾	574,627	699,200
Cross currency swaps on deposits	94,975	96,241
Foreign exchange swaps on commercial paper	405,997	802,172
Lease transactions: sub-leases of rolling stock	208,180	226,850
TOTAL	2,056,900	2,557,786

Commitments received	31/12/2016	31/12/2015
Cross currency swaps on bonds ⁽¹⁾	574,627	699,200
Cross currency swaps on deposits	94,975	96,241
Foreign exchange swaps on commercial paper	405,997	802,172
Commodity hedges	17,100	10,237
Bank guarantees	365,568	323,897
TOTAL	1,458,267	1,931,747

(1) RATP has opted to account for swaps in the same way as traditional loans and borrowings.

The discount rate used to calculate post-employment benefits was 1.50% as at 31 December 2016, versus 2.25% as at 31 December 2015.

18 Train lease transactions and sub-leases (leaseholds)

18.1 AMERICAN LEASEHOLD TRANSACTIONS

EFFECT ON CASH POSITION ON LEASE SIGNATURE DATE < 2002

Lease

In thousands of euros	
Main lease payment income	2,994,004
Sub-lease expenses	2,818,747
RATP net gain	175,257

As the leases are effective over variable periods, the profit generated is recorded as non-recurring income over the term of the leases.

EFFECT ON THE BALANCE SHEET AS AT 31 DECEMBER 2016

In thousands of euros	31/12/2016
Lease receivables	675,164
Lease payables	680,259
Outstanding NPV	5,095
Change in NPV = effect on 2016 net income	1,433

EFFECT ON 2016 NET INCOME

Leases generated income of €1,433 thousand in 2016. The effects are recognised as non-recurring income and expense.

In thousands of euros	Lease signature date				Total	2015 information
	1997	1998	2000	2002		
Income from main lease ⁽¹⁾	3,048	17,502	2,518	5,594	28,662	38,402
Interest paid on sub-leases ⁽²⁾	1,760	7,864	1,797	4,698	16,119	15,923
Reversal of accrued expenses ⁽³⁾			2,515		2,515	157,475
Prepaid interest	1,855	1,089		393	3,337	3,490
Sub-lease expenses ⁽⁴⁾	3,433	8,404	6,380	7,026	25,243	19,600
Other lease income	18	9	80	110	217	346
Early buyout option					0	152,525
Expenses	34	19		58	111	192
Accrued expenses for termination costs ⁽³⁾	3,143	17,482		3,280	23,905	41,237
Interest on loans			155		155	147
Net income	71	558	374	430	1,433	1,935

(1) The main lease payments are received in full upon signature of the lease. The annual installment is recorded in the income statement as an offsetting entry against prepaid income.

(2) Interest received or to be received on sub-lease payments to financial institutions (deposits).

(3) Income from the termination indemnity and excess lease payments is spread on a straight-line basis over the term of the leases.

(4) Sub-leases paid or payable by financial institutions.

18.2 SWEDISH LEASE

EFFECT ON CASH POSITION ON LEASE SIGNATURE DATE < 2004

Lease

In thousands of euros	
Swedish lease tranche 1 completed in 2002	620
Swedish lease tranche 1 completed in 2004	118
Swedish lease tranche 2 completed in 2004	1,444
RATP NET GAIN	2,182

EFFECT ON THE 2016 INCOME STATEMENT

	2016
Deferred amortisation of NPV	125

19 Leases

RATP has two real estate lease-purchase contracts with floating rate payments. They are covered by fixed-rate hedging instruments. The figures presented below include the hedges.

Lease	Original value	Term	Residual value as at 31 December 2016
Philidor Maraîchers	25,308	25	17,726
Cours de Vincennes	5,335	15	0
Lagny offices	12,106	15	10,968

LEASED ASSETS

Balance sheet item	Initial cost	Depreciation and amortisation		Net value
		for year ⁽¹⁾	accumulated ⁽¹⁾	
Land	2,840			2,840
Buildings	39,910	1,351	18,689	21,221
Technical plant, equipment and industrial tooling				
Other plant, property and equipment	317	53	174	144
Fixed assets in progress				
TOTAL	43,067	1,404	18,863	24,205

(1) Depreciation for the period and the accumulated depreciation that would have been recorded if RATP owned these assets.

LEASE COMMITMENTS

Balance sheet item	Lease payments		Outstanding lease payments			Residual price
	for the financial year	cumulative	up to 1 year	+1 to 5 years	+5 years	
Land					2,840	0
Buildings	2,387	28,967	2,848	15,328	16,139	2,287
Technical plant, equipment and industrial tooling						
Other plant, property and equipment	53	174	2	142		0
Fixed assets in progress						
TOTAL	2,440	29,141	2,850	15,470	18,979	2,287

20 Statutory Audit Fees

	KPMG	Mazars
Statutory Audit	254,197	258,197
Work/services directly related		
TOTAL	254,197	258,197

21 Subsidiaries and equity investments

21.1 BREAKDOWN OF SUBSIDIARIES

The table below provides financial information on the companies in which RATP holds more than 20% interest or investments of more than €1.5 million.

Position as at 31 December 2016	Share capital	Additional paid-in capital	% interest held by RATP	Carrying amount of shares		Loans and advances granted by RATP and not yet repaid ⁽¹⁾	Guarantees given by RATP	Revenue excluding VAT at end December 2016	Provisional net result at end December 2016	Dividends received by RATP in 2016
				Gross	Net					
1. Subsidiaries										
SEDP 12, avenue du Val-de-Fontenay, Le Péripôle II 94120 Fontenay-sous-Bois (SIREN 380 038 687)	459	1,884	100.00	457	457	3,354		10,764	301	297
RATP Développement 54, quai de la Râpée 75012 Paris (SIREN 389 795 006)	347,301	16,647	100.00	359,499	359,499	128,000		46,048	2,472	4,000
Logis-Transports 158, rue de Bagnolet 75020 Paris (SIREN 592 025 811)	32,640	247,852 ⁽¹⁾	99.99	33,126	33,126	0	858 ⁽¹⁾	58,683 ⁽¹⁾	10,778 ⁽¹⁾	0
Promo Métro 35, boulevard de Sébastopol 75001 Paris (SIREN 712 029 099)	910	2,210	100.00	2,619	2,619	0		4,469	1,024	928
RATP International 54, quai de la Râpée 75012 Paris (SIREN 419 997 044)	59,721	23,932	100.00	69,779	69,779	5,300		68	3,628	0
Telcité 1, avenue Montaigne 93160 Noisy-le-Grand (SIREN 411 759 962)	1,525	15,767	100.00	1,524	1,524	0		20,274	5,201	5,430
2. Other equity investments										
Other				401	49					6

(1) Latest data available: 31 December 2015.

21.2 ITEMS WITH RELATED PARTIES

Related parties concern companies included in the tax consolidation.

	31/12/2016	31/12/2015
Assets		
Financial assets	617,935	599,863
Trade receivables and related accounts	7,991	6,535
Other receivables	21,901	3,354
TOTAL	647,828	609,752
Liabilities		
Trade and related payables	10,460	6,525
Other liabilities	16,222	1,118
TOTAL	26,682	7,643

22 Economic interest groups

Position as at 31 December 2016	RATP % contribution to overheads
EURAILTEST 1, boulevard Saint-Martin 75003 Paris (SIREN 421 526 468)	10%
COMUTITRES 21, boulevard Haussmann 75009 Paris (SIREN 433 136 066)	59.5%

23 Separate financial statements for transport operations and infrastructure management

Pursuant to the French law of 3 June, 2010 on Greater Paris transport integrated by ministerial order into the French Transport Code of 28 October, 2010, RATP has held separate accounting records for metro and RER Infrastructure management activities and public passenger Transport operations since 1 January, 2012. A balance sheet and income statement are prepared for each activity in the notes to the parent company financial statements. The scope of each activity, the allocation principles for asset and liability items and income and expense items, and the key principles governing financial relations between the activities are specified below.

23.1 SCOPE

23.1.1 METRO AND RER INFRASTRUCTURE MANAGEMENT

The French ORTF law of 8 December, 2009 on public passenger transport services by rail entrusted RATP with the role of managing the railway network infrastructure used for urban public transport in the Île-de-France region, within the limits of the responsibilities allocated to Réseaux Ferrés de France.

RATP's main responsibilities are as follows:

- develop, maintain and renovate the metro and RER infrastructure and guarantee the safety, interoperability and continuity of public transport services at all times;
- manage the control, regulation and security systems of railway lines and networks in the Île-de-France region;
- adapt the lines, infrastructure and facilities for which it provides technical management, to meet the needs of users through enhanced interoperability.

To segregate the activity, RATP created a separate Infrastructure Management Department within the company. This department reports directly to the President and CEO.

The support functions used by this activity are not included in its scope.

23.1.2 PUBLIC PASSENGER TRANSPORT SERVICE

The public passenger transport service comprises the activities that are not related to Infrastructure management, as defined by law.

The activity is operated by 19 departments, each of which reports to the directors of the Executive Committee. Each director is responsible for one of the following divisions:

- Transport operations and maintenance;
- Services, customer relations, passenger areas;
- Projects, engineering and investments;
- Economic and financial performance;

- Strategy and coordination;
- Communication and brand;
- Payroll management and innovation.

The support functions are included in the scope of this activity, including those provided to the Infrastructure management activity, which are subject to internal transfer agreements.

Investments in subsidiaries are also part of this activity.

23.2.1 BALANCE SHEETS

23.2.1.1 Assets, investment grants and the 1976 legal remeasurements

Property, plant and equipment and intangible assets are allocated directly in accordance with the scopes defined for each activity.

Schedule of allocation of main asset types:

Assets	Transport Operations	Infrastructure management
Tramway lines, maintenance workshops, rectifier stations	X	
Metro lines, maintenance workshops, rectifier stations		X
RER lines, maintenance workshops, rectifier stations		X
Centralised control rooms		X
Bus stations	X	
Bus routes with dedicated lanes	X	
Bus stations	X	
Administrative buildings	X	
Personnel buildings	X	
Logistic platforms	X	
Maintenance workshops for railway infrastructure and related technical work		X
Passenger rolling stock	X	
Passenger rolling stock maintenance equipment	X	
Metro and RER maintenance vehicles		X
Tramway maintenance vehicles	X	

Investment grants, revaluation surplus and revaluation provisions are allocated to the associated assets.

RATP is in charge of projects underway on transport network extensions due to its responsibility for the public passenger transport service, as legal and regulatory provisions have not given the Infrastructure management activity the responsibility for building new networks. Once the metro and RER network extensions are built and formally accepted, the relevant assets and liabilities are transferred to Infrastructure management. At year end, these projects amounted to €13.2 million net of investment grants.

23.2 ALLOCATION PRINCIPLES

The key principle for preparing the balance sheet and income statements is to directly allocate the various line items or cash flows. When this is not possible, for instance if the line items or cash flows are managed by one activity and have initially been recognised as such, internal transfers between the two activities have been arranged to bill the activities appropriately, in accordance with general practice. Such agreements govern the scope of the transfers, the valuation principles and the invoicing methods.

23.2.1.2 Provisions for contingencies and expenses

Provisions for contingencies and expenses are allocated on a project-by-project basis to the activity concerned by the contingency. When a project implies a risk common to both activities, an allocation key is determined.

23.2.1.3 Current assets and liabilities (or working capital requirements)

The direct allocation principle also applies to current assets and liabilities such as inventories, trade receivables, trade payables, VAT line items, payroll payables, accrued expenses, etc.

23.2.1.4 Equity and net debt

As at 1 January, 2012, net debt and equity were allocated according to the separate “net debt/equity” gearing ratios determined for the Infrastructure management and Transport operations activities. The levels were determined in line with target long-term gearing ratios and observed market data for each activity.

In millions of euros		Transport operations	Infrastructure management	State-owned industrial and commercial public utility (EPIC)
Net assets allocated	A	3,835	3,941	7,776
<i>i.e. in %</i>		49	51	100
Net debt	B	(2,272)	(2,815)	(5,087)
<i>i.e. in %</i>		45	55	100
Equity ⁽¹⁾	C	(1,563)	(1,126)	(2,689)
<i>i.e. in %</i>		58	42	100
Balance sheet equilibrium	A + B + C	0	0	0
Net debt/equity	B/C	1.5	2.5	1.9

(1) Equity net of investment grants and the 1976 legal revaluations already allocated to assets.

23.2.2 INCOME STATEMENT

As at 1 January, 2012, each activity recognised income and expense items in the separate accounting systems set up by RATP for that purpose.

The principles applied are the following:

- direct allocation of income and expenses where possible;
- when an expense or income item concerns both activities, it is allocated to the main activity concerned, then an internal transfer is set up under an agreement;
- passenger revenue is fully allocated to the Transport operations activity;
- the Île-de-France transport authority’s contributions are fully invoiced to the Île-de-France transport authority by the Transport operations activity, pursuant to the service agreement setting out the financial arrangements with the Île-de-France transport authority. An internal transfer is made for the share attributable to the Infrastructure management activity, the amount of which is defined in the Île-de-France transport authority agreement (the Transport operations activity will need to use the services of Infrastructure management in order to meet performance objectives and to fulfill public service obligations);
- financial expenses are fully recognised in the financial statements for the Transport operations activity when incurred, then an internal transfer is set up for the share attributable to the Infrastructure management activity. The amount re-invoiced corresponds to the cost of Infrastructure management activity net debt, assuming that it is proportionately identical to that of the Transport operations activity.

23.3 INTERNAL TRANSFER AGREEMENTS

The French law of 3 June, 2010 states that: “All direct or indirect cross-subsidies between activities are strictly prohibited”. In order to guarantee this segregation principle, since 2012, approximately sixty agreements have been entered into governing financial relations and tracking all flows between the separate activities.

23.3.1 AGREEMENT STRUCTURES

The agreements comprise:

- an activity section: description of the services or duties entrusted to the activity, along with technical targets and related operating performance indicators;
- economic conditions: agreement valuation, invoicing arrangements and potential agreement review principle;
- agreement management arrangements: reporting, agreement revision and disputes.

The agreements are entered into for a period of five years but are reviewed at the end of each year, to update obligations for the following year.

23.3.2 AGREEMENT TYPES

There are three types of agreements:

1. services corresponding to the provision of metro and RER equipment and facilities for Transport operations. The Infrastructure management activity owns and manages the equipment and facilities;
2. services required for the specific purposes of each activity, which are not carried out within the activity (such as maintenance and operation of the trains used for maintenance work by the Transport operations activity for the Infrastructure management activity, maintenance of tramway equipment owned by the Transport operations activity and carried out by the Infrastructure management activity);
3. head office services, including re-invoicing to the Infrastructure management activity the costs relating to offices owned by the Transport operations activity and the support functions included within the scope of the Transport operations activity (management and financial control, human resources, legal services, etc.).

23.3.3 VALUATION OF AGREEMENTS

Given that the internal transfers occur within the same legal entity, value-added tax is excluded.

23.3.3.1 Type 1 agreements

The valuation of type 1 agreements is set out in the Île-de-France transport authority agreement. The Transport operations activity is obliged to contract with the Infrastructure management activity to use metro and RER equipment and facilities. The value of the services has been determined based on the financial targets set in the Infrastructure management activity's financial model.

23.3.3.2 Type 2 agreements

For type 2 agreements, given that cross subsidies are prohibited, the value of services provided under the agreement is measured at full actual cost price excluding margin.

During the year, internal transfers are made on a monthly basis according to amounts budgeted; in the event of a significant difference between budgeted/actual amounts due, the annual and half-year financial statements are adjusted.

The valuation method is defined by RATP's Finance and Management Control Department, and is used as appropriate by each company department entering into agreements as a supplier. The agreement is signed by both parties (the relevant department of the Transport operations activity and the Infrastructure management

activity) once the services and price determination procedures have been agreed.

The cost comprises:

- direct service costs;
- indirect costs of the local unit and department providing the service, expressed as a rate. The rate and basis to which it applies are validated every year by the Finance and Management Control Department;
- structural costs of the company (invoiced through "type 3 agreements").

23.3.3.3 Type 3 agreements

Office costs comprise:

- rent (for offices rented from third parties) or depreciation (for offices owned);
- property-related expenses.

The cost is allocated to each activity in proportion to the area used.

Depending on the support service provided by the local departments and units, the cost of support functions is allocated directly when the cost is indisputably attributable to a certain activity, or divided between the two activities using an allocation key validated by the Finance and Management Control Department. The allocation basis is the total department expenses, net of income, including office costs and those provided under type 2 agreements.

23.4 FINANCIAL STATEMENTS OF OPERATOR BUSINESS AND INFRASTRUCTURE MANAGEMENT

23.4.1 FINANCIAL STATEMENTS: BALANCE SHEET ASSETS

In thousands of euros	Transport operations activity		Infrastructure management		State-owned industrial and commercial public utility (EPIC)	
	31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015
Assets						
Intangible assets	409,989	371,645	13,612	9,608	423,601	381,253
Research and development costs	159,376	166,498	0	0	159,376	166,498
Lease rights	1,127	1,162	0	0	1,127	1,162
Other	121,676	106,754	6,343	4,884	128,020	111,638
Work in progress	127,809	97,231	7,269	4,724	135,077	101,955
Property, plant and equipment	8,513,262	7,890,811	7,365,983	7,161,383	15,879,245	15,052,194
Land	312,507	318,970	278,798	249,128	591,305	568,098
Buildings	1,337,849	1,374,834	4,846,268	4,782,240	6,184,117	6,157,074
Technical plant, equipment and industrial tooling	423,095	465,174	1,349,580	1,282,048	1,772,675	1,747,221
Transport equipment	4,458,935	4,031,268	34,353	35,591	4,493,287	4,066,858
Other	35,588	40,343	1,512	7,187	37,100	47,530
WIP, advances and down payments	1,945,288	1,660,223	855,472	805,190	2,800,760	2,465,413
Financial assets	1,133,134	1,193,053	49	71	1,133,183	1,193,124
Equity investments	467,053	456,995	0	0	467,053	456,995
Receivables from equity investments	133,484	124,346	0	0	133,484	124,346
Other long-term investments	2,227	2,293	0	0	2,227	2,293
Loans	48,331	55,040	35	57	48,366	55,097
Other	482,038	554,380	14	14	482,052	554,394
Fixed assets (I)	10,056,384	9,455,509	7,379,644	7,171,063	17,436,028	16,626,572
Inventories	152,809	151,698	33,037	29,651	185,846	181,349
Advances and down payments to suppliers	286	677	121	0	407	677
Receivables	1,423,914	1,287,749	125,285	81,931	1,548,975	1,369,241
Trade receivables and related accounts	103,914	98,839	2,043	1,018	105,956	99,857
Receivables from the State and other public authorities	511,189	433,646	119,476	76,603	630,666	510,249
Other	133,648	100,369	3,766	4,310	137,190	104,240
Lease receivables	675,164	654,895	0	0	675,164	654,895
Financial assets	1,185,566	1,276,633	5	0	1,184,323	1,253,303
Marketable securities	980,148	1,006,827	0	0	980,148	1,006,827
Cash and cash equivalents ⁽¹⁾	205,418	269,806	5	0	204,175	246,476
Prepaid expenses	55,913	63,167	58	3	55,971	63,169
Current assets (II)	2,818,489	2,779,924	158,506	111,585	2,975,522	2,867,739
Loan transaction costs (III)	4,709	5,781	0	0	4,709	5,781
Bond redemption premiums (IV)	13,543	11,922	0	0	13,543	11,922
Unrealised translation losses (V)	63,594	65,516	0	0	63,594	65,516
TOTAL ASSETS (I + II + III + IV + V)	12,956,720	12,318,651	7,538,149	7,282,647	20,493,396	19,577,529

(1) Depending on the level of analysis (at company or parent company level), a banking entity can be classified for accounting purposes as an asset or liability.

23.4.2 FINANCIAL STATEMENTS: BALANCE SHEET LIABILITIES

In thousands of euros	Transport operations activity		Infrastructure management		State-owned industrial and commercial public utility (Epic)	
	31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015
Liabilities						
Reserve for assets allocated to	250,700	250,700			250,700	250,700
Revaluation surplus	64,190	66,904	148,733	148,733	212,923	215,637
Capital endowment	433,367	433,367	0	0	433,367	433,367
Reserves	294,699	294,699	0	0	294,699	294,699
• Reserve from the disposal of assets allocated by the Île-de-France transport authority (STIF) and no longer used (redeployed)	184,519	184,519			184,519	184,519
• Reserve from the disposal of assets allocated by the State and no longer used	136	136			136	136
• Reserve from the disposal of assets constructed by the RATP and no longer used (reinvestment)	52,119	52,119			52,119	52,119
• General reserve	57,926	57,926			57,926	57,926
Infrastructure management – Transport operations equity transfer at 1 January, 2012	(1,125,661)	(1,125,661)	1,125,661	1,125,661	0	0
Retained earnings	2,603,274	2,353,330	334,231	229,317	2,937,505	2,582,647
Net income for the period (surplus or loss)	23,701	249,944	117,420	104,914	141,121	354,858
Tax driven provisions	42,679	3,374	414,357	372,682	457,036	376,056
Equity excluding investment grants	2,586,950	2,526,658	2,140,401	1,981,306	4,727,352	4,507,964
Investment grants	3,625,417	3,131,666	2,337,233	2,314,588	5,962,650	5,446,253
Equity (I)	6,212,367	5,658,323	4,477,634	4,295,894	10,690,001	9,954,217
Provisions for contingencies	115,250	97,297	1,946	3,617	117,196	100,914
Provisions for losses and expenses	129,146	132,385	1,906	1,691	131,052	134,076
Contingency and loss provisions (II)	244,396	229,682	3,853	5,308	248,249	234,990
Loans and borrowings	4,368,023	4,358,080	2,866,614	2,825,166	7,233,388	7,159,917
• Île-de-France loans	228,064	249,057	0	0	228,064	249,057
• Bonds	5,123,702	4,758,233	0	0	5,123,702	4,758,233
• Infrastructure management – Transport operations equity transfer at 1 January, 2012	(2,815,000)	(2,815,000)	2,815,000	2,815,000	0	0
• Borrowings from and liabilities to financial institutions (bank account credit balances) ⁽¹⁾	110,331	53,683	75,822	57,066	184,904	87,420
• IM – Transport operations internal transfers	24,208	46,900	(24,208)	(46,900)	0	0
• Other loans and borrowings	1,589,337	1,938,489	0	0	1,589,337	1,938,489
• Accrued interest	107,381	126,719	0	0	107,381	126,719
Advances and down payments received on orders in process	941	368	0	0	941	368
Trade and related payables	225,299	215,547	17,214	19,299	242,513	234,846
Taxes and payroll-related payables	646,965	634,764	37,607	33,299	684,348	667,628
Payables for assets and related accounts	306,308	286,935	134,903	90,449	441,211	377,384
Other liabilities	157,067	154,555	325	13,232	157,392	167,782
Lease payables	680,259	661,423	0	0	680,259	661,423
Prepaid income	51,495	53,420	0	0	51,495	53,420
Liabilities (III)	6,436,357	6,365,092	3,056,663	2,981,445	9,490,606	9,322,768
Unrealised translation gains (IV)	63,600	65,554	0	0	63,600	65,554
TOTAL ASSETS (I + II + III + IV)	12,956,720	12,318,651	7,538,149	7,282,647	20,493,396	19,577,529

(1) Depending on the level of analysis (at company or parent company level), a banking entity can be classified for accounting purposes as an asset or liability.

23.4.3 FINANCIAL STATEMENTS: INCOME STATEMENT

Income statement	Transport operations	Infrastructure management	Elimination of intercompany transactions	State-owned industrial and commercial public utility (Epic)
Operating income	5,338,796	1,073,966	(1,093,818)	5,318,943
Revenue	4,907,945	837,993	(1,093,818)	4,652,119
Revenue from transport services	4,342,412	0		4,342,412
Internal transfers	260,860	832,958	(1,093,818)	
Transport-related activities	140,196	0		140,196
Non-transport revenue	159,012	4,123		163,135
Sales of by-products	5,466	911		6,378
Other income	282,947	159,313		442,259
Stock of manufactured goods	(287)	578		291
Capitalised production	108,368	153,116		261,484
Provision reversals and expenses transferred	119,064	3,842		122,906
Operating subsidies	1,447	0		1,447
Other income	54,356	1,776		56,132
Income used to offset depreciation expenses	147,904	76,660		224,564
Reversal of revaluation provisions	2,886	8,239		11,125
Portion of investment grants transferred to income statement	145,018	68,422		213,440
Operating expenses	5,174,241	830,615	(1,093,818)	4,911,038
Cost of purchased goods and services	1,850,423	327,447	(1,093,818)	1,084,051
Energy	180,734	1,066		181,800
• Electricity	89,624	688		90,312
• Fuel	78,856	23		78,879
• Heating	12,254	355		12,609
Cost of leased tracks	29,887			29,887
User rights payable to SNCF	20,983			20,983
Equipment, supplies and other external expenses	1,618,819	326,381	(1,093,818)	851,381
• Raw materials and supplies	177,672	25,113		202,785
• Other external services	1,441,147	301,268	(1,093,818)	648,596
Tax, duties and other payables	260,013	54,435		314,448
Payroll costs	2,416,057	125,843		2,541,900
Wages and salaries	1,706,729	90,090		1,796,819
Payroll-related costs	703,512	35,753		739,265
RATP employee benefit plan cost, net	5,816			5,816
Amortisation and provisions	617,327	322,867		940,194
Asset depreciation and amortisation	541,478	319,258		860,736
Asset provisions	0	0		0
Current assets – provisions	6,930	2,783		9,714
Provisions for contingencies and liabilities	68,919	825		69,744
Other expenses	30,421	24		30,445
OPERATING INCOME (I)	164,555	243,351	0	407,905

Income statement	Transport operations	Infrastructure management	Elimination of intercompany transactions	State-owned industrial and commercial public utility (Epic)
Financial income	199,571	5	(87,325)	112,251
Equity investments	10,655	0		10,655
Other long-term investments and asset receivables	1,085	0		1,086
Accrued interest and related income	68,542	5		68,546
Internal transfers	87,325	0	(87,325)	
Provision reversals and expenses transferred	524	0		524
Foreign exchange gains	31,196	0		31,196
Proceeds from disposal of marketable securities	244	0		244
Financial expenses	270,283	87,325	(87,325)	270,283
Accrued interest and related expenses	239,057	0		239,057
Internal transfers		87,325	(87,325)	
Amortisation and provisions	5,658	0		5,658
Foreign exchange losses	25,560	0		25,560
Losses on disposal of marketable securities	9	0		9
NET FINANCIAL EXPENSE (II)	(70,712)	(87,320)	0	(158,032)
ORDINARY INCOME (I + II)	93,843	156,031	0	249,873
Non-recurring income	31,690	25,632	0	57,322
Operating transactions	8,011	178		8,188
Capital transactions	2,759	3,891		6,650
Leases	734	0		734
Other non-recurring income	2,310	3		2,313
Provision reversals and expenses transferred	17,876	21,560		39,437
Non-recurring expenses	61,625	62,005	0	123,631
Operating transactions	1,837	104		1,941
Other non-recurring expenses	11,301	2,951		14,252
Depreciation, amortisation and provisions	48,488	58,950		107,438
NON-RECURRING INCOME AND EXPENSE	(29,936)	(36,373)	0	(66,309)
Employee profit-sharing	48,073	2,238		50,311
Income tax	(7,868)	0		(7,868)
TOTAL INCOME	5,570,057	1,099,603	(1,181,143)	5,488,517
TOTAL EXPENSES	5,546,356	982,183	(1,181,143)	5,347,395
NET INCOME	23,701	117,420	0	141,121

24 Post-balance sheet events

Nil.

DESIGN AND PUBLICATION



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PRACTICALITIES

The RATP group's activity and sustainable development report and the financial & CSR report are also available at www.ratp.fr under the heading "Group".



RATP GROUP

54, quai de la Rapée
75599 Paris Cedex 12 · France
www.ratp.fr

