

Statement by the parties assuming responsibility for the annual financial report

We declare that, to our knowledge, the accounts are maintained in accordance with applicable accounting standards and give a true picture of the assets, the financial situation, and the income of the company and of all the companies covered by the scope of the consolidation. We also declare that the enclosed management report contains a table faithfully reflecting the growth, the income, and the financial situation of the company and of all the companies covered by the scope of the consolidation, as well as a description of the main risks and uncertainties that they face.

Paris, 6 March 2020

Chairwoman and Chief Executive Officer

Catherine Guillouard

Chief Financial Officer

Jean-Yves Leclercq

Editorial	4
RATP Group today	6
Our expertise	8
Our model for creating value	10
RATP Group organisation chart	12

Management report 13 Financial results 14 Internal control and risk management 26 Non-financial performance declaration 48

Corporate Governance Report	89
Composition of the Board of Directors and terms of office Compensation and benefits Diversity policy Appendix 1 – List of directors and their terms of office at 31 December 2019	90 92 93 93

	Consolidated financial statements	96
	Statutory Auditors' Report on the Consolidated Financial Statements	97
	Consolidated statements of comprehensive income	101
(Consolidated balance sheets	103
	Consolidated statements of cash flows	104
	Consolidated statements of changes in equity	105
	Notes to the consolidated financial statements	106

Financial statements	158
Statutory Auditors' Report on the Financial Statements Epic balance sheet Epic income statement Notes to the financial statements	159 162 163 164

"Now more than ever, the Group is making operational, economic, and environmental performance its core values." Catherine Guillouard RATP Group Chairwoman and Chief Executive Officer

Despite the detrimental impact the social unrest had at the end of the year concerning economic performance, amounting to −€150 million in 2019, RATP Group achieved solid results in 2019, with a turnover of €5.7 billion, a net income of €131 million, and a net debt of €5.2 billion, stable compared to 2018. Excluding the effect of the strikes, turnover would have grown by €327 million and net income would have increased by €181 million.

However, the past year cannot be boiled down to the strikes, long as they were. All throughout 2019, RATP Group continued to grow, moving from fifth place to fourth among the global public transport groups, in France and internationally.

Moreover, RATP pursued its significant investment efforts (€1.8 billion in 2019), to the benefit of Île-de-France residents, to extend and upgrade its network and improve its quality of service, continuing the energy transition on its bus network, extending four metro lines, pursuing automation works on line 4, and upgrading the rolling stock

on metro and RER lines. As such, in November, our Group and Île-de-France Mobilités signed a historic €2.9 billion deal to upgrade the rolling stock on eight metro lines.

^ ^ ^ ^ **^ ^** ^ ^ ^ ^ ^ ^ ^ ^ ^

RATP has stepped up its innovation policy through its autonomous vehicle trial programme, the launching of a mobility as a service trial in Île-de-France with Île-de-France Mobilités, the creation of a digital factory, and the striking of several partnerships, notably with Airbus and Mobileye.

The company has made customer satisfaction and improving customer experience in public transport the key objectives in its strategy. We are focusing our efforts on all aspects of customer experience, whether it be the relationship with our staff, stations (cleanliness, accessibility), ticketing, or passenger information. Focusing on customers was our priority during the strikes, as witnessed by the unprecedented mobilisation of over 1,200 employees to direct and inform our customers every day.

The unrest at the end of 2019 should not make us forget that social dialogue was a reality over the past year, with no fewer than 19 collective agreements signed. The year



was also marked by our regional action policy to support local employment, encourage social inclusion, and support vulnerable groups, notably through our social outreach unit.

Throughout 2019, RATP Group also stayed on course for more responsible growth. This priority is at the heart of our CSR commitments and was clearly demonstrated throughout the past year.

In 2019, RATP Group further enhanced its commitment to ecological transition. We continued transitioning our approximately 4,700 buses towards "clean" energies such as electricity and NGV, with the clear objective of reducing our greenhouse gas emissions by 50% by 2025. In 2019, our tourism subsidiaries in Paris and London rolled out the first 100% electric double-decker buses.

Towards the end of 2019, the reduction in greenhouse gas emissions per passenger.kilometre reached –13% compared to 2015.

This ecological transition also involves our building assets: as such, in 2019, the construction of the future RATP Habitat

headquarters was awarded the first E+ C- certification for a positive-energy and carbon-reduction building. In April 2019, our Group published its first non-financial performance declaration, in response to a request made as much by investors as by our customers, our partners, and our employees.

Finally, with the successful issuance of €500 million in green bonds in June 2019, RATP once again combined financial performance and environmental performance. This issuance met with considerable success, with a request made for more than €2.6 billion, demonstrating the strong credibility of RATP Group's commitments with regard to sustainable development and the attractiveness of its brand.

Thus, in 2019, RATP Group concentrated on reconciling operational performance, quality of service provided to customers, economic performance, and social and environmental responsibility. This priority, which is at the heart of RATP Group's values, remains more relevant today than ever before.

RATP Group today

RATP Group is a historic leader in passenger transport and a recognised pioneer in automated systems. Today, it is leading the way in new forms of mobility, harnessing its wide-ranging expertise to deliver flexible urban mobility solutions meeting exacting standards. We work with territories to design made-to-measure solutions for passengers and residents, adopting an integrated approach all along the mobility chain and delivering innovative services and infrastructure to shape sustainable cities.

A strategy for profitable growth

Our ambition

To be a world leader in urban, sustainable, and connected mobility and become the privileged partner of smart cities



€7 billion
in turnover in 2025, of which

approximately 1/3 is outside of Île-de-France or in new forms of mobility Group gearing <1

Net debt/ shareholder equity ratio

4 priorities

- 1. Operational excellence
- 2. Competition and development in France
 - 3. Smart and sustainable cities
 - 4. Global development

4 levers

- 1. Innovation and digital technology
 - 2. HR policy and social dialogue
 - 3. Financial performance
 - 4. Governance

The macro trends at the heart of the Group's transformation

Urbanisation and the rise of megacities

Urban share of the global population

in 2015. 70% in 2050

The 500 biggest cities in the world

will contribute, between now and 2025. to

more than 75% Megacities

More

cities with over 5 million residents (15% of the world's population), in 2030

New customer expectations and new uses

Emergence of the sharing economy

of journeys will take place in a shared vehicle in 2030 **Smart cities**

€2,200 billion

Environmental awareness

Cost of pollution

Cost of congestion

of an urban area's GDP (source: McKinsey, 2017) Commitment

France set to be carbon neutral in 2050

Increased and newly-formed competition

Opening up RATP's historic monopoly to competition

£2.5 billion

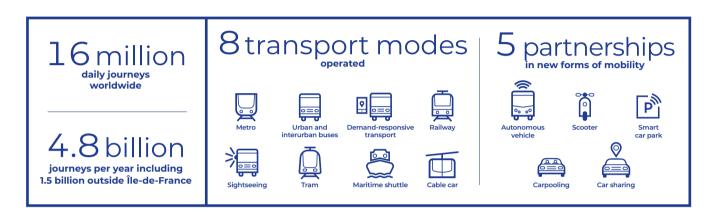
Borders are being erased with manufacturers and major tech firms (Google, Apple, Facebook, Amazon and Microsoft)

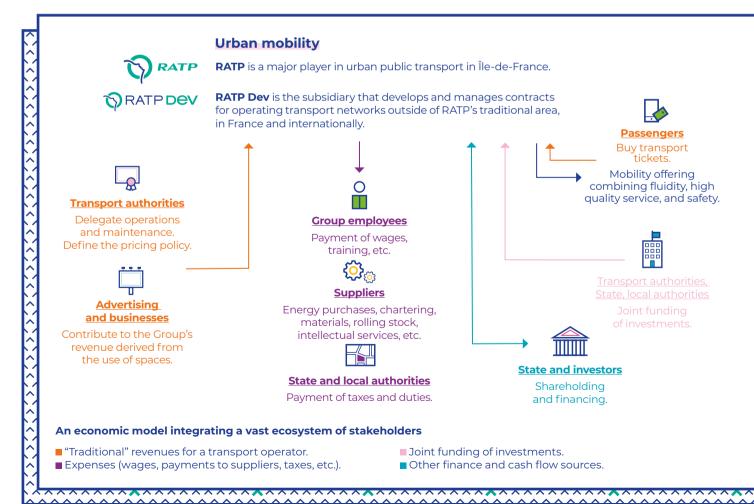
of transport bookings are done via an aggregator (Maps, etc.)

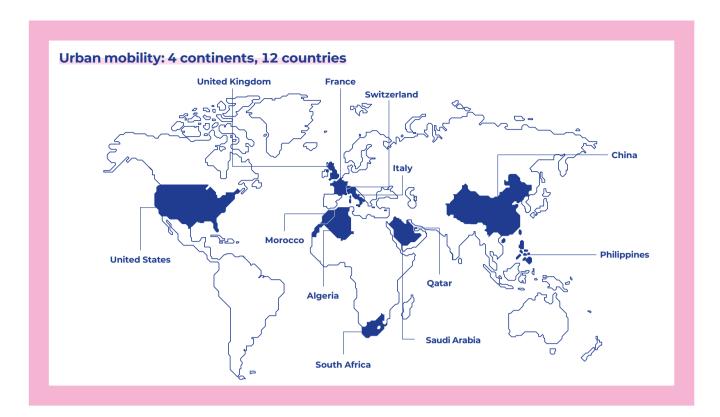
Our expertise

RATP Group has developed unique time-honoured expertise as a multimodal operator and is a world leader in urban mobility.

RATP Group relies on six areas of expertise to build the city of tomorrow.







Urban services

RATP Smart Systems: design, integration, operation, and maintenance of ticketing, multimodal information, and operational support systems.

RATP Cooperation: technical assistance on behalf of public authorities operating public transport networks.

RATP Real Estate: real estate management and engineering for RATP Group.

RATP Travel Retail: marketing and managing urban spaces.

RATP Connect: specialising in the roll-out of fibre optics.

RATP Habitat: management and construction of social housing in Île-de-France.

Engineering

The Group's expertise in engineering allows it to deliver safe solutions for all transport modes in a timely and cost-effective manner.

Systra: RATP participation with a 43.4% stake through RATP Cooperation.

Infrastructure management

RATP manages the infrastructure of the metro and RER lines it operates. It is responsible for the maintenance and upgrading of existing infrastructure and for the technical management of the future Grand Paris Express network.

Investment funds

RATP Capital Innovation: 100% owned by the RATP Participations subsidiary, which invests in targeted companies or investment funds in line with key innovation and development areas: new forms of mobility and smart cities.

Sponsorship

For over twenty years, the RATP Group Foundation has embodied the human values of RATP Group. It supports general interest projects in the heart of the locations where we operate, in France and abroad.

Our model for creating value

Our resources

Human

64.000

employees, 79% in France and 21% abroad

234 trades

Financial

€5.704 billion

consolidated turnover

€1.014 billion

consolidated cash flow

A €30 million fund

(RATP Capital Innovation) for investing in start-ups developing new services and new forms of mobility

Industrial

14

metro lines, 8 tram lines, 2 RER lines, and 350 bus routes in Île-de-France

27%

hybrid, electric, or NGV-powered buses in the Île-de-France region fleet

Knowledge and skills

■ 2.15 million

hours of training provided per year

6.22%

of total payroll devoted to employee training

Energy

■ 3,245 GWh

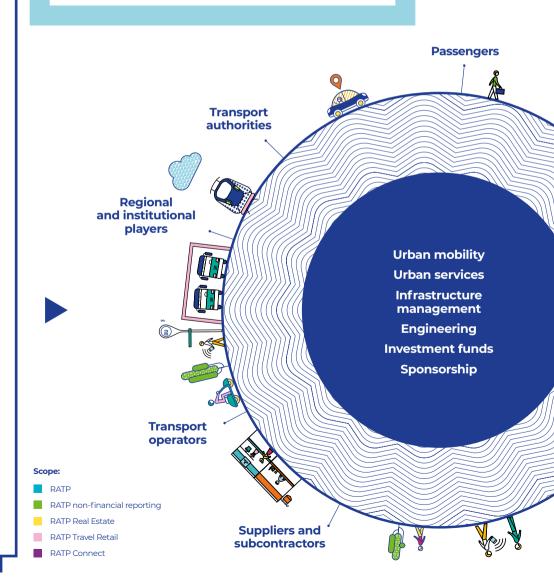
of energy consumed

Our strategic priorities

Achieve operational excellence

Be the privileged partner of smart, sustainable cities Prepare for competition and develop business in France

Pursue development in France and abroad



Our assets

A unique strategic position

Unique expertise

A trusted third party

A responsible company

The strength of an economic model

Strong values

Employees and social partners

Passenger associations and other associations

Our value creation for sustainable cities

Putting the individual at the centre of our activity

415

metro and RER contact points

82%

customer satisfaction rate⁽¹⁾

100%

of the Paris bus network accessible to people with reduced mobility

99%

of RER stations accessible to people with reduced mobility

80,885

beneficiaries of RATP Group Foundation projects

Limiting the ecological impacts of urban life

60

times less CO₂ emitted by metro/RER/tram than by car

100%

of RATP activities ISO 50001 certified (energy management)

■ 5.2 million

journeys through new forms of mobility

99%

of waste recycled in Île-de-France

2.4 ha

of greenery planted on RATP's real estate

(1) Source: Île-de-France Mobilités.

Creating jobs and value in regions

7,279

employees hired by the Group in 2019

128,000

jobs supported or induced by RATP businesses

■€1.73 billion

invested in Île-de-France to upgrade and maintain infrastructure, extend lines, and upgrade stations and passenger information

480

businesses in the network's underground stations in France

■ 170,000 km

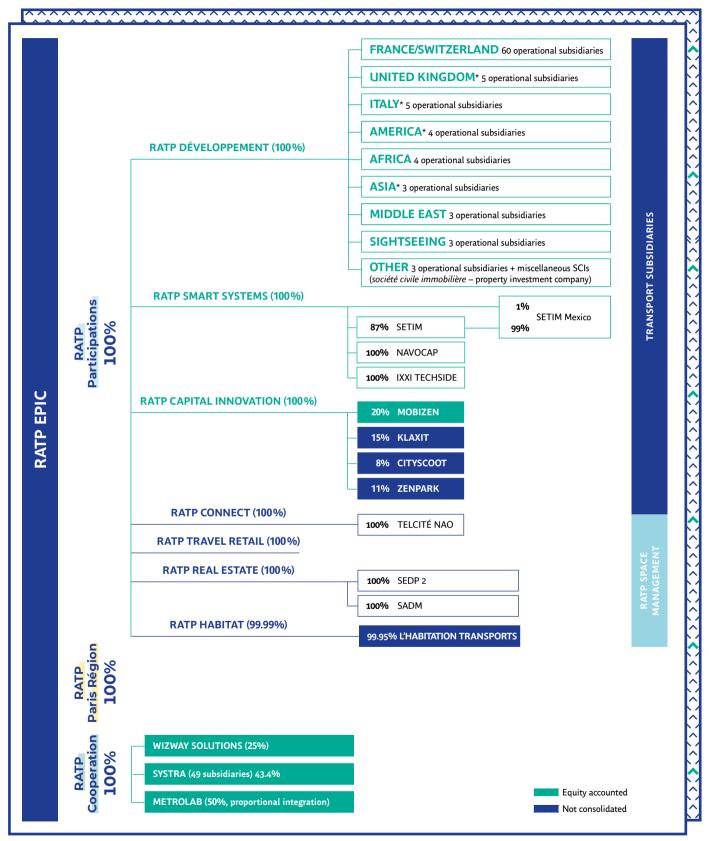
of fibre optic rolled out by RATP Connect in Île-de-France

Contribute to transport safety

27,000

staff members in contact with passengers, including 1,000 dedicated to security

RATP Group organisation chart 31 December 2019



^{*} Subsidiaries held by means of a holding company and fully owned (50% for the Transdev partnership in Asia).

NB: The list of operational subsidiaries is provided in point 38 of the appendices to the consolidated financial statements.

Management report

Financial results 14
Internal control and risk management 26
Non-financial performance declaration 48

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MANAGEMENT REPORT

Financial results

RATP Group is a major public transport provider in France, operating in towns and suburbs, and particularly in the Île-de-France region.

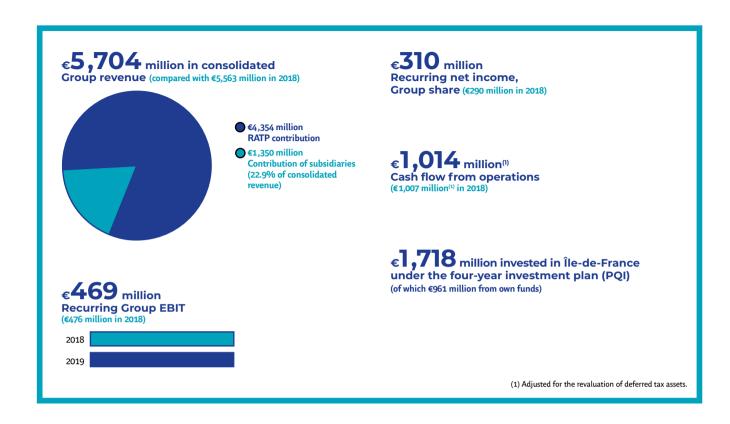
"As a major player in sustainable mobility recognised both in France and abroad, RATP Group places its expertise at the service of cities and their inhabitants on a daily basis, through innovative solutions regarding urban services, engineering and infrastructure management."

Catherine Guillouard
Chairwoman and Chief Executive Officer of RATP Group

As a recognised sustainable mobility provider both in France and abroad, RATP Group daily uses innovative solutions regarding urban, engineering and infrastructure management solutions to contribute its expert knowledge to benefit the Île-de-France region and its inhabitants.

The Group has established itself as a mobility expert in France and internationally. It has also succeeded in developing other complementary expertise in the fields of engineering, infrastructure management and urban services such as real estate, retail space management and innovative ticketing solutions.

RATP Group is pressing ahead with its strategy of profitable growth in key markets for sustainable mobility and the smart city, both in France and abroad. At the same time, it is actively participating in the first calls for tender in the bus and automated metro market in Île-de-France and preparing for bus services in its traditional monopoly region of Paris and the inner suburbs to be put out for competitive tender. The Group is well placed to defend its positions and showcase its strengths to win the confidence of new customers.



Parent company and its contractual environment

The parent company, 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. Its head office is located at 54, quai de la Rapée, 75012 Paris, and it is registered with the Paris trade and companies register.

RATP was set up to run public transport services in Île-de-France. Its mission, as laid down in law no. 2009-1503 of 8 December 2009 on the organisation and regulation of railway transport (ORTF law), is to act as infrastructure manager for urban public transport networks in Île-de-France, subject to the powers granted to SNCF Réseau.

The same law specified that transport lines created before 3 December 2009 should continue to be operated under the terms of the agreements effective as at that date and the agreements to be negotiated under the defined legal framework, until 31 December 2024 for bus services, 31 December 2029 for tram services and 31 December 2039 for other transport services (metro and RER). The operating rights granted to RATP are thus limited in duration, with their renewal being subject to calls for tender.

Lastly, the ORTF law, supplemented by the law on mobility orientation of 24 December 2019, establishes the framework for RATP's compensation as infrastructure manager, ensuring an appropriate return on capital employed.

The Île-de-France transport services and fares are defined by Île-de-France Mobilités (formerly STIF). RATP's activity as operator is governed by multi-year agreements with Île-de-France Mobilités. Under these agreements, RATP undertakes to provide a benchmark transport service defined in terms of quantity and quality and receives compensation based on the direct revenues and flat-rate contributions paid by Île-de-France Mobilités.

If RATP were compensated for the contractual service through direct revenues alone, it would be unable to balance its business model. This is because the fares and the price of season tickets set by the transport authorities do not cover the actual cost of the service. The flat-rate contributions paid by Île-de-France Mobilités thus enable RATP to restore the financial equilibrium needed to provide the service, make investments and achieve the associated contractual targets. Thus, the level of subsidies equates to around 43% of RATP's revenue. At the national level, on less dense networks, the average subsidy is 70% (Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement – Cerema, 2016, for French networks with more than 200,000 inhabitants outside Paris).

Since the adoption of French law no. 2000-1208 on solidarity and urban renewal, RATP has been authorised to design and operate public transport networks via its subsidiaries throughout France and abroad.

In the 2019 financial year, RATP's parent company generated 76.3% of the Group's revenue (77.1%, excluding the December strike). RATP's main customer is Île-de-France Mobilités.



Île-de-France Mobilités compensates RATP through four contributions, the first two of which are flat-rate and non-revisable, except by discounting and amendment (mainly for new services and as a result of tariff reforms):

- the contribution towards the operation of the service and public service obligations enables operating expenses not met through direct passenger revenues to be covered;
- the contribution towards the financing of investments is contractually intended to cover amortisation and depreciation and financial expenses;
- the contribution relating to specific tax expenses passed on to Îlede-France Mobilités at cost (mainly the regional levy and property tax):
- the specific lease contribution to finance the purchase of rolling stock for the T3, T5, T6, T7 and T8 tram lines.

The index used to revise contributions is linked to the performance of indices tracked by Insee, less 0.5% per annum for productivity returned to Île-de-France Mobilités.

Despite a significant downward adjustment from the previous contract, Île-de-France Mobilités' contributions are calculated to achieve sufficient cash flow (€4,263 million) to finance cumulative investments from own funds (€4,221 million) over the term of the current contract (2016-2020).

The 2016-2020 Île-de-France Mobilités-RATP operating contract provides secure funding for significant investment by RATP, while maintaining near-stable levels of debt after five years. This financing is in the form of investment grants and cash flow from operations.

The total investment thus reflects an overall effort of €8.5 billion over five years, of which €4.2 billion is from RATP's own funds, with an annual clause to monitor differences in the investment plan that could lead to a penalty directly impacting compensation.

At the same time, RATP has undertaken to deliver a contractual transport service defined in terms of volume and quality. The contract is passenger-focused, with demanding specifications in terms of service delivery, regularity and quality, a system based on key performance indicators to measure target achievements, and a budget for bonus/penalty payments of +/-€25 million.

Commercial risk (traffic revenues) is shared between RATP and Île-de-France Mobilités. The contract provides for a 1% annual increase in the volume of passenger revenues. If this target is not met, or if it is exceeded, Île-de-France Mobilités and RATP will split the difference 50:50 if this is within a range of \pm 0% of the target. Outside this range, Île-de-France Mobilités will assume 90% of the risk. A specific amendment was planned in 2016 and 2017 to mitigate the impact of the introduction of a flat-rate fare for all zones.

Tariff risk is borne by Île-de-France Mobilités: changes in ticket prices trigger a commensurate adjustment of Île-de-France Mobilités' contributions via a contractual amendment.

Expense risk is borne by RATP.

The 2016-2020 contract takes into account:

- a budget for additional services included in the compensation to fulfill Île-de-France Mobilités' objectives and meet passengers' expectations (€100 million over five years for improvements to cleanliness, safety and bus journey times and assistance on the Noctilien night bus network);
- the standardisation of RATP's tax policy, in accordance with common law, particularly regarding corporate income tax.

Subsidiaries' areas of expertise

The Group's structure has changed at 31 December 2019. Two holding companies have been created: RATP Participations and RATP Paris Région, both wholly owned by RATP.

RATP Participations was set up to simplify the organisational chart by linking all existing subsidiaries to a single company (see organisational chart at 31 December 2019).

RATP Paris Région was formed in response to the need for a new organisational structure to take part in calls for tender in RATP's home region (Paris and the inner suburbs). If it wins a call for tenders, a specific subsidiary is set up, at the request of the organising authority, Île-de-France Mobilités, to operate the transport network.

RATP Paris Région may hold RATP Group's shares in these specific subsidiaries.

The minority equity investments (Systra, Metrolab and Wizway) continue to be held by RATP Coopération (formerly RATP International).

RATP Développement (RATP Dev) is the subsidiary responsible for developing and managing operating agreements for public transport networks outside RATP's traditional monopoly, in France and internationally. **RATP Dev** and its subsidiaries now account for most of the Group's activity outside the parent company RATP.

The sector generally relies on public subsidies, both for operations and investment. For corporate governance reasons, the customer (the network transport authority) typically requires specific subsidiaries to be set up for the agreement. **RATP Dev**, which houses the agreement portfolio and management activities, thus has 123 subsidiaries operating in 12 countries, the most important of which in terms of revenue contribution at the end of 2019 were France, the United Kingdom, Algeria and the United States.

RATP Dev's activities span the entire mobility chain and encompass all modes of transport (metro, tram, bus and coach, train, sightseeing, demand-responsive transport, transport of people with reduced mobility and cable transport) and business lines (operation, maintenance and services).

RATP Smart Systems (formerly lxxi), specialised in the development of mobility support services, was set up to develop expertise in intelligent transport systems (ITS) in France and internationally and to support RATP Group in this arena. It designs, integrates, operates and maintains ticketing, multimodal information and operating support systems. The company also manages the ticketing system for Paris and its suburbs, which is the world's largest multimodal network with 12 million trips taken each day on its metros, buses, trams and regional express trains (RER). Via its subsidiaries Ixxi Techside, Navocap and Setim, RATP Smart Systems also operates in Bordeaux, Toulouse, Saint-Étienne and Mexico City.

RATP Coopération (formerly RATP I) is the holding company for the Group's minority equity investments (**Systra, Wizway** and **Métrolab**). It also provides technical support for public authorities managing public transport networks in countries where RATP Group does not have a permanent establishment, particularly in Africa.

In 2017, RATP set up RATP Capital Innovation (RATP CI), now wholly owned by RATP Participations. With a €30 million capital, this entity invests both directly in innovative companies and indirectly through carefully chosen investment funds whose themes match the Group's core focus areas of innovation and development (new mobility). RATP CI is thus a shareholder of Communauto, Klaxit, Cityscoot and Zenpark.

RATP Real Estate (formerly SEDP) is RATP Group's real estate management and engineering subsidiary. It provides support to its customers (notably RATP) for all their real estate projects:

- development of the real estate portfolio through studies, the construction of facilities and the renovation of buildings and sites, taking into account regulatory developments and economic prospects (master plans or multi-annual plans);
- cost control through energy and real estate audits and project management (HVAC and fire safety system);
- project management support, particularly with complex real estate projects combining industrial sites and housing in densely populated areas:
- facility management and project management support for major maintenance works;
- management of tertiary sites and event venues.

As an extension of the site management activities of **RATP Real Estate, SEDP 2**, its wholly-owned subsidiary, leads projects aimed at modernising and reducing the tertiary footprint on behalf of RATP.

RATP Travel Retail (formerly Promo Métro) is the subsidiary in charge of the letting and management of retail space. It is mainly involved in the design, planning, letting and management of retail space within RATP's metro and rail network.

RATP Connect (formerly Telcité) specialises in the deployment of dark fibre, particularly in metro and rail tunnels, with a view to leasing it to telecom operators, insurance companies, major public companies and SMEs. The network consists of 70,000 kilometres of fibre. Telcité NAO holds the contract for the 3G/4G network, due to be completed in late 2020. Currently, 325 stations, or almost 90% of the network, are covered.

Systra is an equity investment of RATP, 43.4% held via RATP Coopération. Systra is a consulting and engineering group and a world leader in transport infrastructure design. Active in more than 80 countries through its subsidiaries, branches or contracts, Systra is involved in the various phases of transport projects: from preliminary studies and conceptual design through to construction, testing and commissioning, operation and maintenance.

1 — Main trends in 2019

1.1 For transport

1.1.1 RATP

Changes to the Île-de-France Mobilités-RATP contract: 2019 amendments

The results at 31 December 2019 reflect amendments 1 to 18 to the Île-de-France Mobilités-RATP 2016-2020 operating contract. These had an impact on RATP's compensation of +€49 million (+1.3%) compared with 2018, including changes to the contractual service (+€37 million):

- +€25 million for services as part of the reorganisation of the Paris bus network in April 2019;
- +€10 million for the increased services (line extensions and service improvements) on the surface network under amendments 12 to 18, including +€2 million for the extension of the T3b Porte d'Asnières line:
- +€2 million linked to the launch of a holiday night service.

In addition, the contractual compensation was also adjusted for other items (+€12 million):

- +€6 million due to preparations for the reorganisation of the Paris bus network in April 2019. Amendments 13 and 14 provide for total contributions of +€14 million towards the start-up costs of this programme;
- +€3 million for the implementation of the ticketing modernisation programme (Navigo Easy, and Navigo Liberté);
- +€2 million for the clean action plan;
- +€1 million for the development of sniffer dog units.

Amendment 8 of 22 December 2017, agreed with Île-de-France Mobilités, sets out the financial consequences of any corporate income tax savings made, compared with the contractual assumptions:

- RATP is liable for payroll tax (around €64 million per annum) from 2016, without any impact on the amount of contributions;
- RATP will make exceptional payments to Île-de-France Mobilités in 2018 and 2019, capped at €8 million, if actual EBITDA exceeds the indicative contractual EBITDA;
- RATP agrees to reallocate some of the tax savings made (around €54 million) to the capital expenditure defined by Île-de-France Mobilités as part of the programme for the modernisation of rolling stock and related infrastructure, approved on 13 July 2016.

Growth in passenger traffic

In 2019, RATP's traffic within the EPIC scope stood at 3,324 million passengers, down 1.9% (–65 million passengers). Although passenger numbers were relatively flat in the first quarter (+0.6%) due to the negative calendar effect and the *Gilets jaunes* demonstrations, they rose sharply in the second quarter (+4.6%) owing to the bounce-back



effect following the SNCF strikes in 2018. This trend continued until November 2019, boosted by a favourable economic and tourism environment (+2.3% at the end of November 2019). However, the strikes caused a sharp contraction in traffic (–154 million passengers), cancelling out the entire increase witnessed at the end of November.

Metro traffic was down 4% (-61.8 million passengers) for the year, mainly due to the negative impact of the general strike in December. Excluding the strike effect, metro traffic would have risen by 1.6%, reflecting a positive underlying trend.

Annual RER traffic is relatively unchanged from 2018 (+0.1 million passengers), despite strong growth in RER traffic between January and November (+5.1%). Excluding the strike effect, RER traffic was up 3.7% due to the bounce-back effect following the SNCF strikes, incident-related losses and track and ballast replacement works in 2018.

Bus networks saw a 3.1% decline in traffic in 2019 (-31.8 million passengers), exacerbated by the negative impact of the December 2019 strikes. Excluding the strike effect, traffic increased slightly (+0.5%). Traffic on the Paris bus network had trended downward since the beginning of the year. This was due to roadworks and various public events, which significantly impacted driving conditions for buses in the capital. Conversely, the commuter bus network experienced growth.

On the trams, annual passenger numbers were up 9.5% (+28.7 million passengers) from the previous year (+12.6% excluding the strike effect). This increase is mainly due to the increased capacity of the T3b line, with its extension to Porte d'Asnières.

1.1.2 Other developments in France

Business improved significantly compared with 2018:

- At RATP Dev, growth in France was driven by:
- the start of new agreements secured in 2019, representing more than €120 million in full-year revenue:
 - Brest (Bibus multimodal network: 17 bus lines, 29 school routes, one urban cable car line, demand-responsive transport (DRT), transport for people with reduced mobility (TPRM), special services and a bike rental service) since 1 July,
 - Angers (Irigo multimodal network: one tram line, 31 bus lines, 71 school routes, DRT, TPRM integrated into the new agreement, a bike rental service and four park-and-ride services), also from 1 July,
 - the Saint-Malo and Creil bus networks since 1 September;
- the momentum of other agreements in the portfolio.

For the sightseeing tourism business, the summer season was satisfactory in Paris. However, this remains a highly competitive market. **RATP Dev**, in a joint venture with Keolis, won the tender to operate the Charles de Gaulle Express line (Roissy airport link), which is scheduled to come into service in 2025.

Some contracts were not renewed, e.g. FlexCité 92, Moulins Mobilité and an intercity operation in the Douai region. Together, these represented full-year annual revenues of around €18 million.

 RATP Smart Systems continues to develop, particularly through its Navocap and Setim subsidiaries, in which RATP Smart Systems increased its equity stake to 86.75% (compared with 73.3% in 2018). RATP Smart Systems won an SAE IV contract in Blois during the first half of the year. **RATP Smart Systems** is also involved in projects carried out by the digital factory on behalf of RATP Group, and has begun working on the design of a ticket downloading solution for agents and major account customers.

- In the RATP Capital Innovation portfolio:
- Klaxit acquired the company iDVroom (a subsidiary of SNCF), cementing its position as a major operator in short-distance ride-sharing. The company also won the first tender based on 100% short-distance ride-sharing launched by Semitan (Nantes), in conjunction with the public transport network,
- Cityscoot signed a partnership agreement with Uber and is due to be listed on the app from February 2020,
- the commercial development of Zenpark (intelligent parking solution) is continuing,
- CitiZen Mobility, unable to gain a foothold in the healthcare transport sector, decided to cease trading and went into liquidation.

1.1.3 Other international developments

RATP Dev

- In the United States, the Roadrunner airport shuttle business was discontinued mid-year. RATP Dev USA Inc. also failed to renew its contract to manage part of a bus network in Austin from 1 January 2020.
- In the United Kingdom, deregulated activities in the Bournemouth area were sold to local management on 30 June.
- In Qatar, in partnership with Keolis and Hamad Group, RATP Group opened the Red Line – the first section of the Doha metro – to the public on 8 May. The Gold Line came into service on 21 November and the Green Line and the second section of the Red Line opened on 10 December. RATP Dev is continuing to prepare for the opening of the Lusail tram in 2020.
- In Algeria, operations are continuing to ramp up with the extension of existing networks such as the Constantine tram system. An amendment is also in the process of being signed for a one-year extension of the Algiers metro contract. The extension of payment terms in the country is a cause for concern and is the subject of ongoing discussions with the various stakeholders.
- In Egypt, discussions are still under way with a view to signing a contract to operate line 3 of the Cairo metro.
- In Italy, the European Court of Justice and the Italian Council of State ruled in favour of RATP Dev on the action brought by its competitors in Tuscany. The region has therefore awarded the operating contract for the Tuscany bus network to the Group. The contract is expected to be signed in the first half of 2020. In addition, 2019 also saw the opening of the tram line linking Florence airport to the city centre and the full-year effect of the extension of line 1. Business was also boosted by the Latium Cilia contract secured in 2018. In the RATP Capital Innovation portfolio, Cityscoot, a self-service electric scooter operator, launched its offering in Milan and Rome.
- In Saudi Arabia, RATP Dev will extend the mobilisation period for the metro following the client's decision to postpone the opening of lines 1 and 2 until 2021.

- Two RATP Dev contracts in Asia were completed in June 2019: in India, the operating contract for line 1 of the Mumbai metro, and in South Korea, the operating contract for line 9 of the Seoul metro.
- RATP Smart Systems won the ticketing contract for line 3 of the Hanoi metro at the end of the year.
- In Mexico, RATP Smart Systems unveiled the ticketing system for Guadalajara's first bus line.

1.2 Engineering

Revenue rose to €621 million in 2019, despite the uncertain political and economic climate in several countries (United Kingdom and Brazil). Nevertheless, the United Kingdom remains one of Systra's major growth drivers in view of the contracts won in connection with the building of the HS2 high-speed line between London and Manchester and the acquisition of TSP, a British engineering firm with more than 400 employees, in September. Currently, 70% of **Systra**'s business is generated internationally.

As further confirmation that it is on the right track, Systra also enjoyed widespread commercial success in 2019, with orders totalling €855 million at year-end. The main contracts secured were as follows:

- in France, the project management contract for the central infrastructure lot of the third line of the Toulouse automated metro;
- in the United States, the renovation contract for overhead civil engineering structures as part of the Chicago subway renovation, and the train refurbishment contract for the Metrolink network;
- in the United Kingdom, additional services for phase 1 of the HS2 project and the start of design-build services for the Old Oak Common multimodal station on the HS2 line in London during the fourth quarter;
- in India, a general consultancy contract for the Mumbai metro (lines 5 and 9);
- a new design contract for the development of the rail network (passengers and freight) with Etihad Rail in the United Arab Emirates.

The financial statements at 31 December 2019 are balanced. The results reflect a slowdown in activity in the United Kingdom, with several major HS2-related projects being delayed due to Brexit or appeals lodged by competitors. However, Systra benefited from the revival of the Old Oak Common station project in the second half and the announcement that the HS2 project would continue following the general election.

1.3 For real estate development

RATP Real Estate is making a significant contribution to the modernisation of the Group's work spaces, both at head office and at other administrative sites. For this purpose, RATP Real Estate set up SEDP 2, which, as well as providing services for the building's occupants, is investing to modernise and reduce RATP's tertiary footprint. Services were launched at the first site in 2019.

In addition, its complex real estate development projects showcase the Group's expertise in this area.

Its earlier development, Les Ateliers Jourdan-Corentin-Issoire, was followed by another RATP industrial modernisation project combining integration and urban regeneration in a densely populated area. Preliminary work began in 2018. It is scheduled for completion in 2026 with the creation of a neighbourhood based around a new street. In place of the old buildings, the site will accommodate two maintenance workshops (for RATP site maintenance and metro line 12 equipment) and 12 Habitat et Environnement certified dwellings. The multi-use facilities will be accompanied by a day-care centre for young children.

RATP Real Estate supports RATP with its energy transition project, which involves redeveloping seven bus depots ahead of the introduction of the electric bus fleet. The work will include fire safety, transformer rooms, electrical rooms, power transmission, structural reinforcement (building structure and foundations) and reorganisation of storage facilities. In February, the Lagny bus depot was delivered.

In partnership with Systra, RATP Real Estate won the project management support contract for the energy conversion of the Orleans bus fleet. The aim is to convert the entire fleet to electric buses by 2024. The scope of the call for tenders covers the purchase of 214 buses, the installation of 30 slow-charging stations in depots, the reconfiguration of the 2 existing bus depots and the construction of a third.

Regarding RATP Connect, 2019 was a year of strong momentum for the **Telcité NAO** business, with the continued roll-out of 3G/4G in metro and RER stations. By the end of December, 325 stations had been covered, with a goal to complete the project in 2020. Another scheme for passengers in Île-de-France was launched in partnership with RATP to install Wi-Fi points in stations, with some 50 stations equipped during the financial year.

2 — 2019 consolidated net income

The consolidated results are reflected in the following financial indicators:

- revenue was up 2.5% on 2018 at €5,704 million (+2.3% excluding currency translation effects). The growth was driven by the subsidiaries (+11.5%): RATP's business remained flat due to the year-end strike:
- operating income stood at €319 million, down €132 million on
- net income, Group share, at €131 million, was down €69 million on 2018. The difference between 2019 and 2018 is mainly due to the year-end strike, which impacted net income by -€150 million. This impact was partially offset by tax changes, which resulted in an €80 million increase in net income, Group share. Of this, €70 million was due to the negative carry-over effect of deferred tax expense in 2018 under the provisions of the 2019 initial finance law on the deductibility of financial expenses;

- equity was down €22 million on 2018 at €4,835 million, in line with income for the period, less actuarial gains and losses and less currency translation effects;
- consolidated net debt was down €6 million on 2018 at €5,182 million.

Group capital expenditure (before grants) amounted to €1,853 million and remained at a high level. Of the €1,718 million invested in Île-de-France by RATP under the four-year investment plan, almost 65% of the budget was allocated to the network and rolling stock maintenance and modernisation programme. The remainder was used to increase transport capacity.

2.1 Consolidated revenue

In millions of euros	31/12/2018	31/12/2019	Change	In %
TRANSPORT	5,514	5,663	149	2.7
RATP (a)	4,330	4,343	12	0.3
RATP Dev, RATP Coopération and RATP Smart Systems	1,184	1,320	137	11.6
REAL ESTATE DEVELOPMENT	49	41	(8)	-16.0
RATP (a): RATP Travel Retail management mandate	21	11	(10)	-48
RATP Travel Retail, RATP Connect, RATP Real Estate	27	30	2	9.1
RATP Group (b)	5,563	5,704	141	2.5
Contribution of subsidiaries (b – a)	1,211	1,350	139	11.5
Contribution of subsidiaries in %	21.8	23.7(1)		

⁽¹⁾ Excluding strikes, subsidiaries' contribution of 22.9% in 2019.

Group revenue rose by €141 million (+2.5%).

This figure takes into account the impact of the December strike, estimated at -€186 million. Excluding strikes, the Group's 2019 revenue would have increased by 5.9% relative to 2018.

a) RATP's contribution stood at €4,354 million in 2019.

Direct revenues amounted to €2,508 million, up €49 million (+2.0%) from 2018. This increase is due to the strong volume trend (+€98.2 million), boosted by the dynamism of the network and the bounce-back effect following the 2018 SNCF strike, the positive impact of measures taken by Paris City Council regarding the Imagine R Scolaire student travel card (+€4.7 million) and service improvements (+€2.6 million). These increases are partially offset for –€58.5 million by the impact of the year-end strike.

The increase **in compensation paid by** Île-de-France Mobilités (+€49.7 million) was mainly due to contractual indexing of the compensation; the discounting index for RATP's compensation (Île-de-France Mobilités contractual index) rose by 1.2% (compared with general inflation of 0.9%), resulting in a positive impact on revenue of €51.4 million. The increased services resulting from amendments to the Île-de-France Mobilités contract generated additional revenue of €49.3 million, or 1.3%. The tax contribution (+€26.3 million) is also up, following recognition of additional accrued income and the increase in the property tax base. These developments are offset by higher risk-sharing with

Île-de-France Mobilités than in 2018 (–€67.4 million) due to the significant increase in revenues (excluding the strike) compared with the contractual target, the fact that the range was exceeded and the higher penalties for poor performance (–€17.8 million), mainly caused by the December strike.

Other revenues were down —€91.7 million (–27.2%). This is largely due to the reimbursement of passengers following the December strike (–€103 million). Conversely, other revenues were boosted by the solid growth in commercial advertising revenues (+€7 million) and transport and rental department contribution (+€3 million).

b) The subsidiaries reported strong growth during the year (+12%). Overall, their contribution to Group revenue rose from 22% in 2018 to 24% in 2019 (23% excluding the strike).

This growth benefited from a favourable currency translation effect which increased RATP Dev's contribution by €13 million, particularly on the US dollar, Algerian dinar and pound sterling. Some of the most significant contributions in France were from the Brest, Saint-Malo, Angers and Creil contracts.

Internationally, the main contributions were from Saudi Arabia, with the pre-operating ramp-up of the Riyadh metro, growth in the United States through the full-year effect of contracts signed in 2018 (Santa Maria, Yuma, Roadrunner and Washington DC Circulator) and the impact of the Latium Cilia contracts and the extension of line 1 of the Florence tram network in Italy.

2.2 Operating income (EBIT)

In millions of euros	31/12/2018	31/12/2019	Change
TRANSPORT	447	307	(140)
RATP (a)	436	289	(148)
RATP Dev, RATP Coopération and RATP Smart Systems	11	18	8
ENGINEERING (SYSTRA GROUP)	(5)	0	5
REAL ESTATE DEVELOPMENT	9	12	3
RATP Group (b)	451	319	(132)
Contribution of subsidiaries (b – a)	15	30	16

Operating income was down €132 million, of which RATP accounted for -€148 million and the subsidiaries +€16 million.

For RATP, EBIT was down €148 million, mainly due to the impact of the strike (-€150 million). EBIT was also impacted by a higher depreciation expense of €15 million, as a consequence of the ongoing investment programme. These impacts are partially mitigated by the favourable business trend and control of structural and operating expenses.

Payroll costs accounted for 71% of operating expenses. These amounted to €2,671 million in 2019, up €10 million (+0.4%). The difference reflects the increase in average annual headcount (+265 full-time equivalents - FTEs), mainly driven by the new services funded by contractual amendments, the increase in payroll per employee (+1.2%), partially offset by productivity gains (-€28 million) and salary savings linked to the strike (-€28 million).

Energy costs were virtually unchanged from 2018 (-€0.4 million). The modest rise in fuel prices was offset by the effects of the year-end strike.

For the subsidiaries, the increase in EBIT was mainly due to the ramp-up of the Riyadh metro contract, the removal of uncertainty surrounding the Tuscany bus contract and lower development costs, as well as the technical impact of the application of IFRS 16, which offset the impact of operational difficulties encountered in London and the United States.

2.3 Consolidated net income, Group share

In millions of euros	31/12/2018	31/12/2019	Change
TRANSPORT	198	123	(76)
RATP (a)	205	143	(62)
RATP Dev, RATP Coopération and RATP Smart Systems	(6)	(20)	(14)
ENGINEERING (SYSTRA GROUP)	(5)	0	5
REAL ESTATE DEVELOPMENT	7	9	2
RATP Group (b)	200	131	(69)
Contribution of subsidiaries (b – a)	(5)	(12)	(7)

Consolidated net income, Group share amounted to €131 million at year-end 2019, compared with €200 million at year-end 2018, a decrease of €69 million.

The subsidiaries' contribution to consolidated net income, Group share stood at -€12 million at the end of 2019, down €7 million. This change, driven by RATP Dev, was mainly due to losses on assets sold/ held for sale (IFRS 5), including Bournemouth for -€9 million (already deconsolidated at the end of June).

However, Group recurring net income rose by almost €21 million. Consolidated net income, Group share mainly benefited from the positive change in EBIT excluding the effect of the strike.



The fall in income is due to non-recurring items, as follows:

In millions of euros	31/12/2018	31/12/2019	Change
TOTAL NET INCOME, GROUP SHARE	200	131	(69)
Of which non-recurring items	(90)	(180)	(90)
Recurring net income, Group share	290	310	21

Non-recurring items consist mainly of:

- the impact of the strike for –€150 million;
- the positive effect of the year-long suspension of apprenticeship tax, in the amount of €13 million;
- the impact of RATP Dev's business restructuring for —€16 million.

Lastly, the following changes in recurring contribution were noted:

- RATP: +€24 million;
- subsidiaries: –€3 million.

2.4 Consolidated equity

The change in consolidated equity, Group share between year-end 2018 and year-end 2019 breaks down as follows:

In millions of euros	31/12/2018	31/12/2019	Change
TRANSPORT	4,801	4,783	(18)
RATP (a)	4,749	4,761	12
RATP Dev, RATP Coopération and RATP Smart Systems	52	22	(30)
ENGINEERING (SYSTRA GROUP)	27	21	(6)
REAL ESTATE DEVELOPMENT	29	31	2
Promo Métro	1	0	0
Telecommunications	25	27	2
Real estate	3	3	0
RATP Group (b)	4,857	4,835	(22)
Contribution of subsidiaries (b – a)	108	74	(34)

Total consolidated equity decreased €22 million from €4,857 million to €4,835 million, which included:

- an increase of €12 million for RATP;
- a decrease of €34 million for the subsidiaries.

RATP's equity was mainly affected by:

- net income;
- actuarial gains and losses on post-employment benefits;
- the change in value of financial instruments recorded in equity.

For the subsidiaries, the main change was due to the net loss posted by RATP Développement.

2.5 Capital expenditure

RATP Group's capital expenditure amounted to €1,853 million.

The share attributed to RATP stood at €1,730 million, including €1,718 million under the four-year investment plan:

- €606 million set aside to increase transport capacity (compared with €618 million in 2018);
- €1,112 million for modernisation and maintenance (versus €961 million in 2018).

The increase in transport capacity included:

- €560 million in investments for infrastructure operations under the State and regional contractual plan (+€34 million compared with 2018). The expenditure for 2019 was mainly linked to the continuation of metro and RER extension projects, including metro line 11 to Rosny-Bois-Perrier (€240 million), line 14 to Mairie de Saint-Ouen (€190 million), line 4 to Bagneux (€46 million) and line 12 to Aubervilliers (€33 million). For trams, key projects in 2019 were the extension of T3 to Porte d'Asnières (€6.5 million) and T1 to Val-de-Fontenay (€3 million);
- €45 million in rolling stock investments linked to operations to increase transport capacity (—€47 million compared with 2018). The main projects involved the purchase of tyre equipment for the MP14 on line 14 (€31 million), and €7 million for the development of tram services (essentially for lines T3, T5, T6, T7 and T8).

A total of €1,112 million (€151 million more than in 2018, i.e. a 16% increase) was invested in the modernisation and maintenance of infrastructure and rolling stock (excluding rolling stock related to increased services).

These investments included:

- €901 million in expenditure linked to modernisation and maintenance, which is an unprecedented amount (+€90 million compared with 2018). Of this, the largest items of expenditure concerned transport systems, maintenance and renovation of infrastructure in 2019. Expenditure on the development and operation of passenger areas (€170 million in 2019, or +25%) and on the buildings policy (€156 million, or +13%) rose the most since 2018;
- €211 million in rolling stock expenditure, up significantly from 2018 (+€61 million compared with 2018). This increase mainly concerned expenditure on buses (€131 million in 2019, compared with €71 million in 2018). RER and metro expenditure was more or less the same in 2019 as it was in 2018 (€79 million), as was expenditure on trams (less than €1 million).

2.6 Consolidated net debt

Changes in consolidated net debt between 2018 and 2019 were as follows:

In millions of euros	31/12/2018	31/12/2019	Change
Net debt – Transportation	5,221	5,220	(1)
Net corporate debt	5,069	5,135	66
RATP leases and miscellaneous	26		(26)
Effect of IAS 39	(42)	(39)	3
Other IFRS restatements	4,997	5,155	158
RATP EPIC net debt	5,053	5,095	42
Metrolab	1	(1)	(2)
Net debt of Transport subsidiaries	169	125	(44)
Net debt – Engineering	0	0	0
Net debt – Real estate development	(33)	(39)	(6)
NET DEBT – CONSOLIDATED RATP GROUP	5,188	5,182	(7)
Net debt of subsidiaries	136	87	(49)

Consolidated net debt fell by €7 million between 31 December 2018 and 31 December 2019.

The increase in RATP's net debt (€42 million) was mainly due to the loss of revenues caused by the strike.

The Group's cash flow from operations amounted to €1,014 million. The Group's capital expenditure of €1,060 million net of grants was covered by cash flow from operations associated with the improvement in operating working capital requirement (WCR).

To finance the day-to-day running of the business, capital expenditure and loan repayments, RATP sources most of the necessary resources from exchanges or over-the-counter debt markets. RATP has several financing programmes covering both long-term and shorter-term maturities, including:

- a Euro medium term note (EMTN) programme for a maximum of €6 billion;
- a negotiable European commercial paper programme for a maximum of €2.5 billion.

Ratings from Moody's and Fitch Ratings provide financial markets with assurance and visibility on RATP's creditworthiness. Short- and long-term ratings awarded by ratings agencies were as follows at 31 December 2019:

- Fitch Ratings: AA, F1+ with stable outlook;
- Moody's: Aa2, P1 with positive outlook.

RATP's financing strategy seeks to diversify its investor base and place its bonds internationally:

- use of new types of finance (green bonds);
- private placements with foreign investors;
- presentation of RATP via international road shows.

This financing strategy was successfully implemented. Thus, in June 2019, RATP successfully issued a new €500 million green bond with a yield of 0.35% (OAT +0.26%). There was huge demand for the bonds from French and international investors, a testament to RATP's solid reputation and credit rating and the relevance of its sustainability policy. Remarkably, the bond issue was more than five times oversubscribed, with a final order book value of €2.6 billion.

RATP also completed a private placement in December 2019 for €86.7 million, maturity in 2036, with a yield of 0.40%.

2.7 Research and development initiatives

€4 million was allocated to these initiatives in 2019.



3 — Parent company financial statements

2019 was the fourth year of the Île-de-France Mobilités-RATP 2016-2020 contract.

RATP's financial results lagged 2018, with EBITDA and net income down €67 million and €116 million respectively.

The strike had an impact of -€150 million on EBITDA and net income. This impact mainly consisted of €103 million in losses due to passenger refunds, €59 million in lost ticket revenue and €24 million in penalties and ancillary income, partially offset by expenditure savings of +€36 million.

Without the strike, EBITDA would have increased by €83 million in 2019. The dynamic growth in passenger revenues (+2.6% excluding strikes) and ancillary revenues (+5.8%), driven by advertising revenues and the strong economy in the Île-de-France region, was hampered by the sharp decline in sales in December.

Costs increased at a moderate pace, with the continued productivity effort (1% in 2019, or €36 million) releasing funds for transformation projects and the impact of business growth (maintenance work schedule and capital expenditure).

EBIT was down €105 million to €288 million. It was impacted by the December strike by €158 million. Without the strike effect, EBIT would have been up €53 million.

Despite lower financial expenses (+€3 million), net income was negatively impacted by non-recurring transactions, mainly due to an increase in asset retirements. Net income was down €116 million compared with 2018.

Investments (excluding equity investments) amounted to \in 1,730 million in 2019, including \in 1,718 million under the four-year investment plan. This represented an increase of \in 148 million on 2018, when it stood at \in 1,582 million.

Net debt totalled €5,135 million. Debt rose by €66 million compared with 31 December 2018 (€5,069 million): the negative revenue impact from the strike was partially offset by the improvement in operating WCR.

4 — Outlook

The Group is expecting further dynamic business growth in 2020. It is reliant on a stable economic climate, continued growth in traffic in Île-de-France with the full-year effect of the reorganisation of the Paris bus network, the opening in summer 2020 of the extension of line 14 to Mairie de Saint-Ouen and the start of major contracts for RATP Développement (Tuscany and Riyadh bus and metro).

While continuing its transformation with the creation of RATP Infrastructures and the transformation of the surface network, the Group is continuing its efforts to keep operating and structural expenses under control. It forecasts a sharp acceleration of the rate of investment in Île-de-France as major projects are ramped up, including the extension of lines 4, 11, 12 and 14, the automation of line 4, the energy conversion of buses and the modernisation of rolling stock (MP14, MF19 and MING).

The Group is also continuing to invest in new mobility and to form strategic partnerships that help position it as the partner of choice for smart, sustainable cities.

5 — Other financial information

5.1 Subsequent events

No significant events occurred between the end of the financial year and the date of this report.

5.2 Table of consolidated financials since 2012

Year	Net income, Group share In millions of euros
2012	284.8
2013	292.8
2014	298.2
2015	437.3
2016	171.0
2017	338.9
2018	199.9
2019	130.9

In accordance with article 243 bis of the French general tax code, we would like to remind you that profit distributed over the last three years was as follows:

- 2018: €0;
- 2017: €0;
- 2016: €0;
- 2015: €0.

RATP does not pay dividends, in accordance with the terms of its public service agreement with Île-de-France Mobilités, which specifies that the projected cash flow from operations released by the agreement is to be used to invest in modernising Transport operations and Infrastructure management.

5.3 Maturity schedule for trade payables

In accordance with article L. 441-6-1 of the French commercial code, the breakdown by maturity date of outstanding trade payables at financial year-end was as follows:

In thousands of euros	Total	Not past due (for information)	Less than 30 days past due	30 to 60 days past due	More than 60 days past due
Number of invoices	37,979				
Trade payables incl. tax	378,545	362,337	7,226	1,329	7,653
Total purchases incl. tax	3,594,464				
Trade payables/total purchases as a %	10.5	10.1	0.2	0.0	0.2

5.4 Maturity schedule for trade receivables

In accordance with article L. 441-6-1 of the French commercial code, the breakdown by maturity date of outstanding trade receivables at financial year-end was as follows:

In thousands of euros	Total	Not past due	Less than 30 days past due	30 to 60 days past due	More than 60 days past due
Number of invoices	8,070				
Trade receivables incl. tax	65,772	53,169	4,732	2,700	5,171
Revenue incl. tax	4,886,180				
Trade receivables/revenue as a %	1.3	1.1	0.1	0.1	0.1



1 — Overall reference framework

To safeguard its decisions and strengthen its ability to create value, RATP Group strives, as much as possible, to prevent the risks to which it is exposed. It therefore has systems in place that facilitate the control of its businesses, the effectiveness of its operations and the efficient use of its resources.

Risk management and internal control play complementary roles in controlling activities:

- "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, where necessary, are 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 to which the company's activities are exposed;
- 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⁽¹⁾."

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 whose roles, as set forth in IIA⁽²⁾ 2120 standard, is to evaluate the effectiveness and contribute to the improvement of risk management processes.

1.1 The three lines of defence

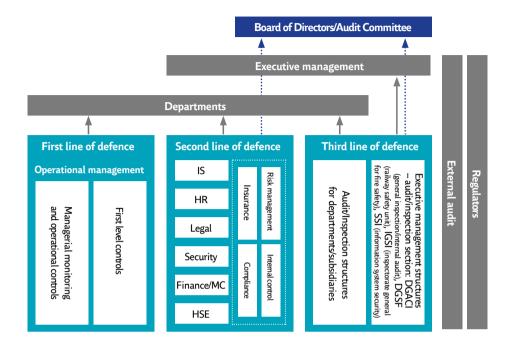
With this in mind, RATP Group's approach is based on the principle of three lines of defence, as defined by COSO⁽³⁾ 2013 and clarified by the French audit and internal control institute (Institut français de l'audit et du contrôle interne – Ifaci) and the French association for corporate risk management and insurance (Association pour le management des risques et des assurances de l'entreprise – Amrae):

- the first line is represented by operational management, which ensures the achievement of results and the control of the work processes by monitoring day-to-day activities; it thus constitutes a first line of defence against failure to achieve goals;
- the second line is represented by cross-company functions, which continuously monitor operating activities; the functions dedicated to risk management, internal control, compliance and insurance management contribute to this second line of defence;
- the third line of defence is borne by the internal audit function at department and executive management levels.

⁽¹⁾ AMF reference framework, updated in July 2010.

⁽²⁾ Institute of Internal Auditors.

⁽³⁾ Committee of Sponsoring Organizations of the Treadway Commission.



In addition to this approach, RATP Group organises its internal control system on the basis of the five components developed by the COSO: control environment, risk assessment, control activities, information and communication, and monitoring. Each of these components is implemented at department, unit, support function and subsidiary levels.

1.2 Control environment

Against a backdrop of transformation, RATP Group pays particular attention to the legibility of the standards and procedures that form the basis for the implementation of internal control in any organisation.

To this end, a programme aimed at modernising the principles of corporate governance has been launched. It is designed to align the company's reference documents with the Group's strategic guidelines and to support greater openness to competition, the increasing internationalisation of its activities and the strengthening of regulatory requirements in terms of risk management. The "organisation and management" corporate governance principle thus establishes a new reference framework, in a context of business activity control and clear allocation of roles and responsibilities. The corporate governance principles will be compiled in a governance book that will become a reference document for management and all employees.

This approach is accompanied by a designation of powers and responsibilities, which is designed as a key step in implementing the operating processes established within RATP Group. For example, the system of delegations is developed around the various legal instruments necessary to cover risks and promote smoother decision-making for senior executives and managers.

2 — Organisation chosen

2.1 Risk management function

The role of the head of risk management, who operates at RATP Group level within executive management and as a member of the Executive Committee, is to oversee comprehensive corporate risk management systems to ensure that risk, as determined by the Executive Committee, 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 the 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 risk 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 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.

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. Similarly, for the declaration of non-financial performance, the CSR risk map has been prepared according to the same principles and the data will be taken into account for the next iteration of the corporate risk map.

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

Deployed since 2010, this approach 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.

In addition, following a risk management maturity analysis conducted in late 2014, a risk management improvement programme has been implemented along two major lines:

- the creation of a risk committee to ensure better monitoring of risk mitigation actions: the work of this committee has enabled risk owners to present their risk management and control work based on action plans and key risk indicators (KRI). This committee continued its work in 2019:
- the implementation of a risk management information system (RMIS): following a call for tenders and a functional adaptation proposal based on a world-renowned market tool, this application was deployed by the Group starting in December 2018. It enables the monitoring of action plans and cross-functional risk, internal control and audit reporting, and includes an insurance module.

Finally, in addition to these measures, since 1 November 2016 the insurance and risk functions have been merged within the Risk Management department so as to take into account all mitigation measures, including the transfer to the insurance market for major risks. In this context, various opportunity studies were carried out in 2019 to offer the Group appropriate insurance coverage.

2.2 Compliance function

The RATP Group compliance function falls within the Risk Management department. It is part of a division that reports to a head of compliance.

Its role consists of:

- defining the processes to be followed to cover risks, provide support to line staff in rolling them out, and sounding the alert if difficulties arise:
- ensuring the proper implementation of:
- specific mandatory controls, performed by managers, using the appropriate guidelines,
- the compliance programme defined by the Group's Chairwoman, which engages different players in the company such as the ethics, human resources, procurement and corporate accounts functions.

For this, the compliance function is supported by the internal control function, which draws up the control guidelines to be used by the departments and subsidiaries in charge of compliance risk control. Furthermore, audits conducted by the internal audit function provide recommendations that enable it to improve the management of the risks to be covered.

The head of compliance coordinates a network of compliance correspondents in departments and subsidiaries.

2.3 Internal control function

Within RATP Group, internal control is designed to contribute to excellence and overall performance by promoting:

- 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 the control of major risks and the achievement of the objectives expressed in the company's strategy.

At local level, 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 processes.

Support and control groups are on hand to assist managers (for example in the management control, human resource and procurement functions) in achieving their goals by providing expertise and measuring performance. The internal control function helps operational management conduct first-level controls.

Coordination of the internal control network, under the jurisdiction of the Audit and Internal Control department, was established by the Chairwoman in several successive mission statements, thus underlining the importance of the efforts to the executive management.

On the basis of this roadmap, internal control procedures were deployed for the major risks of both EPIC and the subsidiaries, first in the area of operations and then in the support functions. For example, a major overhaul of internal control took place with the Finance department based on the AMF guidelines and is in the process of being finalised for 2020.

Similarly, in response to the obligations of the Sapin II law, in addition to the controls assumed by the Finance and Management Control department, a pilot phase was carried out with the management control teams in a few departments to test and verify the first controls defined for risk accounts to generalise its application within EPIC in early 2020. As part of the strengthening of the internal control system for accounting procedures, an initial consulting service is provided to a subsidiary to assist said subsidiary in defining and implementing appropriate controls.

With regard to operational processes, four consulting missions were carried out with RATP Dev's smaller subsidiaries to support them in the development and formalisation of controls adapted to their environment and the mode of transport operated (tram or bus, urban or interurban).

The deployment of the RMIS, which began in December 2018, continued until June 2019 and provided an opportunity to implement training for departmental and unit focal points. The system provided an opportunity for numerous exchanges to share and develop concepts and best practices for business management and internal control. Once the tool was introduced, some departmental internal control correspondents began to set up their unit's network of internal control coordinators to support the implementation and deployment of the system among the management teams of the operating units.

2.4 Internal audit function

2.4.1 Audit/inspection structures for business lines/ departments

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 depending on the department). In particular, it allows the implementation and the effectiveness of first-level controls to be assessed.

2.4.2 Company-wide structures reporting to executive management

2.4.2.1 The Audit and Internal Control department

The Audit and Internal Control department (délégation générale à l'audit et au contrôle interne – DGACI) reports to the Chairwoman and is responsible for carrying out the following on behalf of Executive Management:

- internal audit missions to "provide assurance for the level of control over operations by monitoring and assessing RATP Group's operations"(1);
- guidance on change management (e.g. feedback, assignment on internal control structure, etc.).

The Group audit is a decision-making tool for executive management:

- the audit focuses on the company's major risks (financial and regulatory) and strategic priorities, including economic performance, process efficiency and management quality;
- the audit responds to the company's needs with assignments performed outside of the annual work;
- the audit methods are aimed at encouraging 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⁽²⁾ and the main risks identified during RATP Group's risk mapping process. When each audit is completed, a written report is sent to the Chairwoman 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 and submit it to the head of Audit and Internal Control for approval. Implementation is monitored by the Audit and Internal Control department and the individual who commissioned the audit with a progress report at six, twelve and eighteen months. The action plans drawn up for audits with significant challenges give rise to regular progress reports to the Executive Committee, which are preceded by managerial reviews with the relevant managers.

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

Lastly, the head of Audit and Internal Control also acts as Inspector General⁽³⁾, which is separate from Internal Audit, intended to inform the Chairwoman about sensitive topics or issues likely to impact the Group's economic interests.

2.4.2.2 The Railway Safety unit

The Railway Safety unit (délégation générale à la sécurité ferroviaire – DGSF) reports to the Chairwoman and is responsible for monitoring railway safety procedures throughout the company. It enforces the railway safety policy, structures and general management guidelines through a systemic approach, as defined by the Chairwoman.

The CEO delegates the management and implementation of RATP's railway safety policies to the Railway Safety unit. Railway safety policies concern infrastructure, technical installations, vehicles and operating, maintenance and control policies. The Railway Safety unit thereby 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 Railway Safety unit may request professional advice, as appropriate, from the various departments (e.g. railway engineers, inspectors, general safety controllers). All surveys, studies and reports conducted on railway safety incidents are sent to the unit.

As part of its various activities, the Railway Safety unit organises and conducts railway safety audits aimed at providing assurance on the level of control over systems that contribute to railway safety, monitoring and assessing the operation of RATP Group and possibly its subsidiaries. It suggests preventive and corrective measures in conjunction with the departments concerned as part of a process improvement strategy. These audits take place in accordance with the principles issued by the NF EN ISO 19011 standard of January 2012.

⁽¹⁾ Instruction 432D of November 2013, article 2.2.

⁽²⁾ Members of the Executive Committee, department heads and chief operating officers.

⁽³⁾ Instruction 541 of November 2011.

Railway safety audits consist of verifying the existence, consistency and correct application of procedures and the effectiveness of processes and organisations, thus making it possible to:

- identify hazards, prioritise them and assess the corresponding risks;
- set up prevention and protection systems (barriers);
- maintain the effectiveness of these systems and adapt them to systemic and environmental changes;
- continuously improve risk control.

Through this function in particular, RATP applies the management and organisational principles that enable it to control the operational safety (reliability, maintainability, availability, security) of the systems for which it is responsible to its customers, employees and third parties.

Railway safety audits can be carried out in all areas: organisation, management, production processes, methods, establishment and management of regulations and guidelines, control of configuration changes, and the human factor related to the employees of RATP and the companies working for it. These mainly involve fixed installations (infrastructure, electrical and signalling equipment, information, control, command and operating assistance systems, fire-fighting systems, etc.) and rolling stock for the various transport networks operated by RATP (metro, RER, tramway and funicular).

The unit is responsible for RATP and its subsidiaries. Its investigative power applies to all of the Group's entities. As a result, it may be asked to perform assignments as part of an RATP Dev project or concession.

2.4.2.3 Inspectorate general for fire safety

An Inspectorate general for fire safety (inspection générale de sécurité incendie – IGSI), made up of employees specialising in protection against fire and panic risks, was established at RATP pursuant to the decree of 20 February 1983.

Reporting directly to the company's executive management, the Inspectorate general for fire safety is independent of any management, department or other entity in charge of the studies, works or management of the facilities covered by IG 544 A.

Inspectorate general for fire safety representatives are *ex officio* members of the Departmental Advisory Commission on Safety and Accessibility (commission consultative départementale de sécurité et d'accessibilité – CCDSA) for matters concerning them. They draft formal opinions for each of them.

As such, they participate in the work of this commission, in particular during the review of construction or development projects and during visits prior to the opening to the public of stations and transport systems.

In 2019, the Inspectorate general for fire safety issued opinions on:

- compliance with the general provisions of the safety rules governing fire safety and the panic risk in public establishments:
- each work file affecting spaces open to the public such as administrative applications for building permits, construction authorisations and applications to build, convert or change areas open to or used by the public, such as the train and metro stations operated by RATP,

- following building work, when visiting station areas prior to their 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 initiatives of the Inspectorate general for fire safety in 2019:

- delivery of construction work for the centralised surveillance of the Nation and Saint-Germain-en-Laye RER A stations, and the Madeleine (line 14) and Temple (line 3) metro stations;
- continued delivery of construction work at the multimodal Châtelet-Les Halles site (Châtelet metro station);
- examination and preparation of notices for 2 building permit applications for Barbara station (line 4 extension) and Clichy-Saint-Ouen station (line 14);
- examination and issue of the notice for 23 applications for authorisation to build, convert or change buildings open to or used by the public.
- examination and preparation of 2 opinions for the safety file of the line 4 automation efforts (OPAL4);
- examination of additional technical files after favourable feedback from prefectures for major projects such as the Symphonie fire safety system, OPAL4, adaptation of existing stations for L14, centralised monitoring of fire safety for the RER Nation sites;
- issu 128 favourable opinions on regular inspections to ensure the continued operation of stations.

The above opinions from the Inspectorate general for fire safety are part of the management of fire risks both in the project phase and during station operation.

2.4.2.4 The Group information systems security audit function

The information systems security (ISS) audit function is led by the Information Systems Security Officer (ISSO). The ISS audit is applied on the basis of standards that vary according to the targeted area: industrial system, information system (IS), electronic payment system, system covered by the French defence code, or system supporting the processing of personal data. They are most often conducted by external service providers who may be accredited by an institutional body depending on the field.

The ISS audit makes it possible to verify the correct implementation of protective measures resulting from a risk analysis or to deepen the knowledge of a system in a particular context. It may involve the configuration of application bricks, network architecture, system organisation and management, software source code or physical protection devices. In the project phase, some audits may be conducted at the system supplier's premises.

A process was initiated in November 2019 to build a framework agreement with subsequent contracts to facilitate the acquisition of cybersecurity audit services for the benefit of the entire Group.

2.4.3 The launch of a specific project for the internal audit function

The work of internal audit underwent a major shift in 2019 with a roadmap drawn up by the Group's Chairwoman. The aim is for the audit function, at each level of responsibility in the company, to better coordinate its action and work within a shared reference framework, relying in particular on common risk assessment methods, to inform management's decision-making. This work also requires thinking about the business skills to be mobilised and the structural indicators to be aligned with the standards of the profession.

This roadmap was established after a state of play analysis and a benchmark conducted with large public and private companies. This diagnostic was shared during a seminar of the audit and internal control network led by the Audit and Internal Control department in the autumn of 2018.

This initial work has led to collective work paths emerging that make it possible to structure a business line function. These paths, which are centred on the audit function, will be used in an integrated approach to build a business line that creates the balance between risk management, internal control and internal audit essential for the overall efficient control of our activities. The corporate governance rules for that business line will be defined in accordance with the relevant internal general instructions.

This project is being overseen by the Audit and Internal Control department in active collaboration with the head of risk management and various departments and is consistent with the work already performed in internal control.

3 — Risk factors: identification and management

3.1 Railway safety risks

3.1.1 Identification of risks and risk factors

Given its activities, RATP Group has identified the risk of a "rail accident" as a major risk that could lead to the feared collective or individual accidents such as a train collision, derailment, fire, a passenger being dragged along by a train, or a passenger falling onto the tracks.

This risk is handled within the company, by each department, for the specific parts that concern it.

Cross-functionally, various risk factors are monitored constantly by the Railway Safety unit, with supervision of their control:

 the ageing of infrastructure and equipment, which may result from late renewals or miscalibration of investment priorities;

- the lack of control of critical safety interfaces (between rolling stock and infrastructure: rail-wheel, traction current collection, gauges);
- the lack of safety in the development or renovation of lines, in particular the integration of new interface equipment into existing lines:
- the lack of oversight or management of railway safety.

3.1.2 Risk management

Concerning railway safety, the control mechanism is based in particular on the interdepartmental railway safety steering committee, chaired by the head of the Railway Safety unit. The purpose of this committee is to deal with all areas relating to railway safety (infrastructure, equipment, stations, rolling stock, regulations, organisation, etc.) for each metro, RER and tram system. Therefore, at each committee meeting, accidents, significant incidents or near misses are analysed to identify the causes and define the action plans to be implemented to deal with them and prevent their recurrence.

The control system is also based on the monitoring of safety level indicators defined by the technical department for cable cars and guided transport prepared by the operators and maintainers for the systems that concern them, as well as for danger warning precursors prepared by the Corporate Risk Management (CRM) unit of the General Safety Control (GSC) department on the basis of an analysis of potential accidental chains, including transitional and worsening situations. The analysis results of their changes are available to the departments concerned, to enable them to define and implement the corrective and preventive actions corresponding to the changes observed. They are examined by the rail safety steering committee, which serves as the second pair of eyes in terms of observing changes in indicators.

Periodic interdepartmental commissions are organised by the CRM unit under the aegis of the Railway Safety unit for each critical safety interface such as rail-wheel contact, traction current collection and gauges. These commissions aim to handle interface issues related to modifications or malfunctions relating to functional and technical guidelines, configurations, operations and maintenance.

The railway safety audits carried out by the Railway Safety unit also help to bring the identified risks under control (see section 2.4.2.2 of this report).

In addition, the École polytechnique de Lausanne (EPFL) was asked, as an independent external expert, to evaluate the infrastructure manager's asset maintenance programmes to define the right level of investment and project investment needs over the next ten years, taking into account the ever-increasing traffic volumes and levels of demand on the infrastructure.

In addition, the Railway Safety unit coordinates the preparation of annual railway safety reports that assess the level of safety of railway systems using the contributions provided by each operating, maintenance and engineering department. The Railway Safety unit relies on the expertise of the CRM unit of the GSC, which, in addition to the missions described above, is also responsible for carrying out the following at the request of executive management or individual departments:

- 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;
- raise awareness of systems risk management policies and of human and organisational factors, for which a new audit has been commissioned from EPFL (Ecole polytechnique de Lausanne), a Swiss Federal Institute of Technology.

3.2 Road safety risks

3.2.1 Identification of risks and risk factors

Road safety is an important marker for RATP Group, which operates networks in the Île-de-France region, the rest of France and abroad.

This passenger transport activity carries various risk factors regarding:

- compliance with regulatory requirements, as regards regulations relating to the transporting of passengers, in particular working conditions, the highway code and vehicle roadworthiness testing guidelines;
- oversight of road safety with a clear division of roles and responsibilities;
- managerial oversight of drivers and the handling of accidents and passenger complaints.

3.2.2 Risk management

In the Île-de-France region, and for the networks operated elsewhere in France and internationally, a control system has been deployed and is based on a number of strong guiding principles:

- strengthening of operational management and its appropriation of the processes and results relating to road accidents;
- internal control guidelines focused on the processes of enforcing regulations, monitoring drivers and dealing with accidents;
- conducting human factor analyses based on prevention;
- dissemination and promotion of best practices;
- analysis of accident-prone areas;
- control of costs related to road accidents;
- search for improvement through innovation.

To strengthen the control of road risk, the approach adopted is to expand the implementation of a dedicated management system that should make it possible to improve all results related to road safety. This system led to Afnor obtaining ISO 39001 certification for the bus and rolling stock maintenance departments for public transport on EPIC's surface network.

3.3 Infrastructure risks

3.3.1 Identification of risks and risk factors

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

The Infrastructure Management division ensures that the risks associated with the degradation and/or ageing of infrastructures, as well as the risks associated with equipment failure, are controlled.

This control is reflected not only in compliance with equipment maintenance plans but also in the responsiveness of the teams in the event of a malfunction.

The Infrastructure Management division also monitors climate events, such as flooding and heat waves, that can have an impact on the safety and availability of infrastructure.

Specific and adapted means of control can be used to deal with such events.

3.3.2 Risk management

Since its creation on 1 January 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.

In 2019, the Infrastructure Managment division committed itself to updating the resources used to control the risks identified as major.

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 classed as "significant" are the subject of a weekly presentation and are tracked within the Executive Committee. They are discussed and analysed by senior departmental staff and management teams in the units in question.

These discussions determine follow-up for "significant incidents" to be implemented according to the decision recorded.

Follow-up is conducted:

- either by the departmental management committee for significant events that are specially monitored and call for feedback or additional information;
- or during quarterly railway safety management meetings for major incidents that have had an impact on railway safety and/or availability and/or that have occurred on many occasions. These meetings are steered by the department head. All safety and availability indicators are examined (rail, fire, property and persons) using a dashboard and dedicated ongoing action plans;

or during the Feedback Committee meeting. In this case, the head of department requests for the formalisation of a feedback report and designates the person who will oversee the process.

Since 2016, first-level internal controls, performed within the operational units, have been included in the safety indicators dashboard - railway safety and safety of goods and people. They are therefore reported on a quarterly basis at the quarterly rail safety management

The feedback process has been operational since 2003 in the Infrastructure Management division. The Feedback Committee, common to the Infrastructure management division and Project Management department, monitors significant incidents that require specific actions to be implemented. Feedback is monitored on a quarterly basis. The Project Management and Operational Management departments are associated with it, as well as GSC.

Where the head of department decides to follow up a "significant incident" analysed by the departmental management committee via feedback, the Infrastructure Development division and the Project Management department Feedback Committee will carry out the monitoring.

In addition, since January 2016, a company-wide railway safety operational feedback process has been implemented and managed by the GSC department under the Infrastructure Management division.

At company level, the Infrastructure Management division takes part in Railway Safety Executive Committee meetings, where necessary, contributing analysis of incidents and measures taken. Operating reports of danger signal indicators (prepared by GSC/CRM) serve as input data for the Railway Safety unit. Indicators in "respond" status are presented during the first part of the Railway Safety Executive Committee meeting and make it possible, if necessary, to determine preventive improvement actions that are monitored by the

Where required by technical equipment-related or regulatory developments, each business line's technical committee reviews these developments and assesses their impact and feasibility prior to their approval.

Since 2017, the Group has formalised infrastructure condition booklets. There are two types of infrastructure condition booklets:

- the first, covering the entire metro network, with an analysis of multi-year indicators. This infrastructure condition booklet is updated each year;
- when a line is renovated, a specific infrastructure condition booklet is formalised. In addition to an analysis of multi-year indicators, this type of infrastructure condition booklet is completed with the planned asset maintenance programme. This addition will make it possible to study optimisation opportunities under the modernisation project.

3.4 Compliance risks

3.4.1 Identification of risks and risk factors

The integrity and development of the Group's activities are based on a zero-tolerance policy towards malpractice and a total rejection of corruption and influence peddling in all of its forms, the fight against conflicts of interest and fraud, and compliance with competition

The main compliance risks addressed include situations where RATP Group is in the position of principal (buyer) or bidder in calls for tenders. These risks underlie all aspects of our operations and can materialise in everyday business life in the form of gifts, invitations, sponsorships, patronage, lobbying and facilitation payments.

3.4.2 Risk management

To prevent and manage identified compliance risks and, to that end, align the Group with the best global standards, the Compliance division continues to deploy the anti-corruption prevention programme in EPIC departments and in first- and second-tier subsidiaries. Established at the corporate level, this system is based on the eight obligations of the Sapin II law and, at this stage, takes the form of the formalisation and dissemination of the internal regulations that make up the control environment:

- the Group's code of business conduct and procedures covering the main risk areas defined in the code of conduct, including gifts and invitations, conflicts of interest, lobbying and facilitation
- updating of the internal regulations of EPIC departments and subsidiaries, including not only the code of business conduct but also the anti-corruption rules to be obeyed;
- the procedure for identifying and managing employees exposed to the risk of corruption;
- the strengthening of accounting control procedures for at-risk accounts and at-risk transactions;
- the whistle-blowing procedure.

Corruption risk mapping has been completed and the associated anti-corruption action plans are being monitored for all EPIC departments, as well as the Group's subsidiaries and the Group Foundation.

Additional actions in response to the obligations of the Sapin II law are being developed in the report on non-financial performance.

In addition, topics relating to competition law and the duty of vigilance are now integrated into the compliance programme, which will make it possible to formalise expectations and schedule the actions in progress.

3.5 Ethical risks

3.5.1 Identification of risks and risk factors

RATP Group's approach is to ensure that any employee faced with a delicate and unprecedented situation is able to make a fair decision that respects his or her values, complies with the rules of law and is mindful of the requirements expected by the Group and its stakeholders.

There are many ethics risk factors, given the growing proportion of the Group's international business, the increased regulatory requirements in terms of business integrity or individual data protection, the necessary respect for human rights and sustainable development, as well as the sensitivity of issues relating to religion, discrimination and various forms of harassment, as well as the renewed issue of diversity.

3.5.2 Risk management

To make it easier for employees to understand the ethical issues at stake, the Group's code of ethics has been overhauled and the General Delegation for Ethics has taken a strong initiative to promote its adoption by the various managers. The message conveyed at these meetings was that ethics is not a constraint but a tool. Ethics allows all employees to protect themselves and the company. Every employee must be able to rely on the Group's six values: the human factor, commitment to the public interest, respect, professionalism at the service of our clients, a taste for a challenge and openness.

The code of ethics is designed to be a practical tool available to employees and particularly to managers when they are faced with an ethical problem in their work. The problem-solving methodology of the code of ethics is based on the analysis of value conflicts. It is therefore in the field, with day-to-day identification of "grey areas", that the methodology will be of help to managers. In this way, the link with ethical risk prevention is demonstrated.

Consistency between the company's ethics arrangements, compliance programme and CSR policy is central to risk prevention. The relevance of this overall vision is proven every day with current events. This led us to create the Cersec (Comité éthique, RSE et conformité – Ethics, CSR and Compliance Committee) in 2017. The Ethics Department has been appointed to act as secretary. In 2018, Cersec approved and validated the new presentation of the code of ethics and the new whistle-blowing system, in compliance with the provisions of the Sapin II law of 9 December 2016.

Since its creation in 2015, the General Delegation for Ethics has been monitoring ethics on a continuous basis and collecting various reports and alerts from employees.

In so doing, RATP Group is reaffirming its previous commitments in relation to the UITP Charter in 1999, the United Nations Global Compact in 2003, the National Accessibility Charter in 2003 and the Company Diversity Charter in 2004.

3.6 Risks linked to IS, telecommunications and cybercrime

3.6.1 Identification of risks and risk factors

The identification of cyberrisks is assessed according to confidentiality, integrity and availability criteria in which protection, defence and resilience mechanisms have been placed.

Given RATP Group's services, there are threats not only to its social and economic activity but also to its industrial operating systems, as with other players in the sector. The company is therefore particularly attentive to the emergence of attack vectors but also to potential information leaks.

Risk assessment is performed using two main approaches:

- in the approval strategy applicable to any new critical or vitally important project, risk analysis is a prerequisite step to ensure security at the design stage and the definition of protective measures;
- risks are identified macroscopically through the risk management system in version 3 of the RMIS.

3.6.2 Risk management

In November 2019, a mission statement from the Group's Chairwoman reaffirmed the objectives to be achieved to control cyber-risks and support the Group's strategy:

- in corporate governance:
 - bringing into compliance of IS, in particular when they are subject to the French defence code or the general data protection regulation.
- the production of guidelines that reflect the Group's security policy,
- proposals on the development of the cybersecurity function within the Group.
- contribution to national and international institutional dialogue on the Group's cybersecurity challenges;
- in human resources:
- awareness campaigns for all employees,
- leadership of a network of ISS managers within the departments and subsidiaries;
- in prevention:
- the establishment of strategic and technological oversight to anticipate, as early as possible, threats, counter-measures and best practices
- risk management and, for identified scenarios, the transfer of risk to an insurance system,
- evaluation and control of levels of entity security;
- in resilience:
- the processing of reported incidents and their evaluation,
- the establishment and, where appropriate, implementation of appropriate crisis and contingency plans,
- the integration of security starting with the design of applications.

In addition, the cybersecurity governance principles were updated at the end of 2019. They define the roles and responsibilities of the functions involved in the management and operational management of cybersecurity.

Finally, since 2003, the company has had a security policy in place to increase the operational efficiency of ISS. This policy sets out the principles and rules relating to the confidentiality, integrity and continuity of IS. As part of this policy, an organisation facilitated by the Group-level ISS manager has been built through a structured functional network of contact persons in each RATP department, thus forming a functional security chain.

Operational management is based on a detection and defence system:

- the security operations centre is deployed for the most exposed IS to develop the Group's real-time analysis and control capacity and to guarantee the speed and consistency of our actions in the event of security incidents (hacking, massive viral attacks, etc.); operated by specialised service providers, its field of action has been extended to industrial systems;
- the RATP security system is adjusted on an ongoing basis; this process is reflected in numerous technical projects:
- segmentation and fragmentation of flows depending on the criticality and degree of confidentiality of the data exchanged as part of the renewal of the core of the transmission network,
- deployment of a data protection system (hard drive encryption) for workstations that store sensitive data, in particular for roaming users,
- introduction of centralised access management systems and privilege accounts in data centres and industrial systems,
- managing obsolescence and system updates as part of a formalised industrial policy.

3.7 Personal data protection risks

3.7.1 Identification of risks and risk factors

The issue of the protection of personal data is addressed under the European general data protection regulation 2016/679 (GDPR), which entered directly into force in European Union member States on 25 May 2018.

Given its activity, the protection of personal data has been identified as one of the various major cross-functional risks for RATP Group, especially in relation to the management of customer and employee data.

3.7.2 Risk management

Following a consultant's advice, the company's structure was adapted and the Executive Committee drew up a specific compliance plan. These adjustments as well as the identification of the relevant data processing operations are in progress at Group level.

A Data Protection Officer (DPO) was appointed and, since June 2018, he has reported to the head of risk management for both RATP EPIC and its subsidiaries, RATP Connect, RATP Habitat, RATP Travel Retail and RATP Real Estate. Given their particularities (numerous smaller subsidiaries and/or specific areas of activity), an RATP Dev DPO and an RATP Smart Systems DPO have also been specially appointed.

A network of DPO has been set up comprising not only the DPOs of the subsidiaries but also local agents in the EPIC departments.

For 2019, following the survey of data processing, emphasis was placed on:

- upgrading the management of IS projects;
- privacy impact studies (with about ten studies underway);
- development of operational procedures (management of requests to exercise rights, management of violations, management of consent, etc.).

Similarly, 2019 has made it possible to give responsibility to cross-functional sectors (human resources, purchasing, IS) and strengthen the coordination and training of the network of GDPR correspondents in the departments and subsidiaries. This network has met eight times since it was created, including three times in 2019, at which the following were presented:

- the data protection impact assessment and the CNIL (French Data Protection Authority) tool made available;
- the "Privacy by design" IS project methodology, the presentation of the GDPR oversight tool and an update on the data retention period.

3.8 Procurement risks

3.8.1 Identification of risks and risk factors

Given the issues at stake in the company, various themes are subject to particular vigilance:

- assessment and anticipation of overall needs;
- management of calls for tenders;
- performance of contracts;
- monitoring of contracts and purchases.

3.8.2 Risk management

As part of a roadmap launched in 2018, the purchasing function has launched a number of projects to rethink, challenge and simplify processes, standards and documentation, organisations and business lines to become more agile, cross-functional, efficient and value-creating. Among the projects that have been or will be launched, the sector has identified areas for improvement and risk control actions that will be worked on and finalised in 2019-2020:

- integration of an upstream needs expression phase in the purchasing process;
- integration of a downstream phase for contract transfer and support for the contract manager in the purchasing/contract performance monitoring process;
- clarification, distinction and complementarity of the roles and responsibilities of actors in the purchasing process (buyer, segment lead buyer, decision-maker, management controller, market manager, legal expert, etc.);
- · overhaul of tools and associated documentation (IS, purchasing reference model, etc.);
- implementation of a planning/programming process for purchasing requirements (visibility for future purchases and feedback on requirements);
- implementation of a specific process/governance for strategic purchasing files;
- implementation of cross-functional framework agreements (pooled purchases).

The Real Estate Development, Purchasing and Logistics department helps control procurement risks by:

 sharing and disseminating best practices, 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;

- upstream controls by reviewing files relating to purchases in excess
 of €5 million (threshold raised at the end of 2018) and submitting
 purchases of over €5 million to the Procurement Board; this
 threshold was revised to €8 million for services purchases and
 €15 million for works and supplies purchases by the decree of
 24 September 2019;
- preparing monthly, half-yearly and annual reports on procurement for the Board of Directors' CMTTT (commission de la modernisation technique et technologique et du transport – Technical and Technological Transport Modernisation Committee) and an annual report on the work of the Procurement Board.

During 2019, significant work included:

- the implementation and deployment of the function action plan, which sets out the vision and purchasing trajectory for the coming years and sets new objectives to be achieved each year. Some emblematic projects to simplify the purchasing process are worth noting;
- raising the Procurement Board thresholds by €5 million for all types of purchases to €8 million for purchases of services and €15 million for purchases of works and/or supplies (ministerial decree of 24 September 2019):
- the introduction of electronic signing of contracts;
- the first projects of the function plan, which are almost completed.
 The function has defined new projects already launched/to be launched that affect the overhaul of process activities, the extension of digitisation, the clarification of the roles and responsibilities of the various actors in the purchasing process and the structuring and strengthening of purchasing governance;
- the continuous updating of the procurement guidelines, in particular the practical information, writing guides, modules providing training in new rules on placing orders and the GDPR, and the availability of a new 2019 range of Purchasing Academy training courses, with in particular the adaptation of the course offering on awareness-raising and corruption prevention (Sapin II law) and the duty of vigilance;
- keeping financial monitoring tools (Intuiz for French suppliers and Dun & Bradstreet for foreign suppliers) available to buyers to detect suppliers at risk of default;
- the launch of a one-year pilot with Dow Jones for conducting supplier due diligence under the Sapin II law (in addition to two other pilots relating to the assessment of partners by compliance and of customers by the Finance and Management Control department);
- the definition of the terms of deployment of the assessment of suppliers in line with the degree of exposure to risks and the carrying out of initial due diligence; at first, limited to potential contract holders presented to the Procurement Board (since October 2019) then gradually extended to all candidates consulted and presented to the Board; at the same time, the company is scaling the assessment of suppliers "in stock" (already holders of contracts or orders with RATP) based on country and activity-purchasing segment risks and is performing the initial due diligence of suppliers above the Procurement Board's thresholds. Depending on the supplier/country/activity risk, due diligence will be more or less thorough and result in the supplier being placed under surveillance, remedial measures (adaptation/cancellation of the contract) and the exclusion of candidates who have been found guilty of crimes from a call for tenders:

- the strengthening of the procurement risk approach, better structured and oriented towards suppliers/CSR-vigilance/financial/ GDPR:
- the definition of new governance specific for strategic purchases;
- the maintenance of CSR expertise and price indexing in the purchasing process for purchases in excess of €8 million for services and €15 million for works and supplies (files referred to the Procurement Board):
- information campaigns for department and function employees exposed to the risks of corruption/influence peddling, which will continue in 2020. Please note that the departments are the risk owners of their specific risks. A procurement function summary has been drafted, which also makes it possible to identify company-wide improvement initiatives;
- the validation of the mapping of the procurement risks of the Real Estate Development, Purchasing and Logistics department and the related action plan;
- the approval of mapping of CSR-vigilance procurement risks, making it possible to identify the purchasing issues at stake and the action plans to be implemented.

3.9 Legal risks

3.9.1 Identification of risks and risk factors

Opening to competition brings new risks for the company in various areas: the legal and social conditions for performing public transport activities in a competitive environment, the conditions under which RATP Group operates in the competitive market for the lines that will be opened to competition, the development of strategic partnerships or even the inclusion of new forms of mobility.

The regulation of urban public transport in Île-de-France is a new challenge with the extension of the powers of the regulatory authority for road and rail activities, which is becoming the Transport Regulatory Authority, in the field of transport data, compensation for infrastructure management activities and security activities.

3.9.2 Risk management

The control of these various issues is ensured by the Legal department, which performs consulting, study, document preparation, litigation management and legal training for all the fields of activity of the company. It prepares for or initiates change, makes proposals to the public authorities, monitors legal developments (other than those relating to technical matters), publishes information on best practice, assesses risk – in close collaboration with RATP's head of risk management and head of compliance. 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 2019, the Legal department assisted with several issues and the following strategic areas in particular:

- handling competition law issues that have emerged with the opening to competition of network operations in the Île-de-France region. The Legal department oversees the conditions under which RATP Group operates in the competitive market and manages pre-litigation and litigation situations;
- management of a dispute upon the referral of preliminary questions to the Court of Justice of the European Union regarding the interpretation of European regulation no. 1370/2007 of 23 October 2007, whose outcome affirmed RATP Group's potential for development;
- monitoring European issues (changes in regulatory texts, State subsidies, market concentrations, etc.);
- implementing texts transposing market directives and concessions, with the updating of the guidelines and all the elements of the procurement guide;
- development in Île-de-France by contributing to the definition of the strategy, actions to be undertaken and monitoring of responses to calls for tenders, particularly our part in the tender for the operating contract for the T9 tram and future calls for tenders for the operation of the Grand Paris Express;
- monitoring of network development projects (in particular the Grand Paris project) in terms of infrastructure management activities;
- 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;
- relations with Île-de-France Mobilités (legal aspects for a number of common issues, notably those relating to the operation of services, assets, overall control of construction projects, ticketing, protection of the brand and data transfers) and monitoring of the execution and application of the agreement with Île-de-France Mobilités;
- development of research, development and innovation contracts (protection and promotion of RATP's know-how);
- identifying and optimising different ways of improving and promoting innovation at RATP;
- handling the company's online and social network issues and measures:
- monitoring changes in personal data protection (GDPR) and procedures for the provision of data to the public (open data) with the definition of protocols (Macron and Lemaire laws), and the adaptation and creation of new contractual arrangements for the application of these laws;
- analysis of legal risks, particularly in the monitoring of projects, and the definition and performance of contracts in order to ensure the company's performance;
- the security of the company's assets and the security of 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 and actions in support of vulnerable persons;
- issues arising in relation to the fight against racism and discrimination, secularism and the implementation of the "Travailler ensemble" (working together) plan;
- supporting the development and operation of subsidiaries;
- support for the implementation, within RATP Group, of a structured compliance process.

3.10 Development risks

3.10.1 Identification of risks and risk factors

As development initiatives within RATP Group intensify, especially in recent years through the development of its subsidiaries, the risks associated with development are gradually increasing. As the Group develops in new countries (mainly through RATP Dev) or in new sectors that are adjacent to the historic public transport sector but contribute to the Group's strategic positioning as a partner to cities, the nature of these risks diversifies.

In this context, a group of experts met to produce a mapping and analysis of these risks to identify and quantify the most sensitive ones for RATP Group. These experts come from various Group entities. including the RATP Dev and RATP Smart Systems subsidiaries, whose development experience has been used to illustrate specific cases of risk exposure.

In summary, three subjects are being given particular attention: the risk of loss of market share, the failure of a partnership or joint venture and the health and safety risk of the Group's employees who contribute to the Group's development.

3.10.2 Risk management

For each of these risk factors, a management plan has been prepared, based on the maturity of each of them.

As regards the risk of losing market share, it is obviously a major risk in the very specific context of the exit from the historical monopoly as enacted by the 2009 French law on public passenger transport, which provides for the gradual introduction of competition between RATP's Île-de-France networks. In 2016, a dedicated programme (called "Proactif") was thus launched across the Group to prepare RATP for competition. The dedicated, multidisciplinary team of more than 15 specialists aims to identify the major transformation issues arising from the future competitive bidding process. This team regularly reports to the executive management (Chairman and CEO and Executive Committee) to propose roadmaps for arbitration ahead of the 2024, 2029 and 2039 deadlines.

As regards the risk of failure of a partnership or joint venture, this increases along with the alliances and joint ventures necessary for the Group's development, for example internationally. Ability to control it is based on a meticulous upstream analysis of potential partners and a thorough legal review of partnership agreements.

Finally, health and safety risks for RATP Group's seconded employees or expatriates who contribute to the Group's development were thoroughly analysed in 2014 and renewed in 2018 with an updated action plan as follows:

- creation of a Group-level Safety Committee;
- drafting of an international safety guide;
- provision of a mobile application for the geo-location of travelling employees and management of health and safety alerts.

3.11 Professional risks

3.11.1 Identification of risks and risk factors

Given the company's activities and the major changes in the Group, the risk factors to be brought under control are aggression in the context of customer contact, worksite safety during infrastructure and space modernisation, support for employees during changes in business lines and the Group's transformation.

3.11.2 Risk management

Issues of performance and trust between RATP Group, its employees and its social and external partners, preventing occupational risks and promoting the health of everyone form the core of the Group's day-to-day actions.

The occupational health and safety policy deployed by the Group is part of the Group's human resources policy and is designed to contribute to a lasting improvement in the quality of work life for all employees. Ambitious objectives and an action programme were set in 2016 with the launch of the Group's Occupational Health and Safety initiative. They are discussed in further detail in the report on non-financial performance.

To achieve these objectives, the action programme is based on two complementary goals:

- changing the culture and behaviour of each employee to make health and safety everyone's business;
- anchoring the prevention of the occupational risks central to industry practices.

Conducting the Occupational Health and Safety initiative is based on:

- an organisational structure that involves each level of responsibility
 within the company, with cross-functional coordination and deployment of prevention standards by the Occupational Health and
 Safety unit, which reports to the Group Human Resources department, supplemented by local coordination within the operating
 departments by the occupational risk prevention missions with
 regard to their performance results;
- multidisciplinary work with prevention professionals (occupational medicine, ergonomists, prevention specialists, social services, occupational psychologists, etc.).

The reinforcement of a culture of safety (adapted job training, periodic reminders of safety rules, sharing of feedback, changes in job organisation, etc.) and the implementation of appropriate monitoring resources (internal control, managerial visits, site inspections, internal audits, etc.) form the basis of actions.

In particular, internal control is deployed as soon as necessary to ensure the proper implementation of occupational risk prevention provisions and improve these provisions where necessary. Two systems are in the process of being supervised: managerial oversight of employees following a work-related accident and the analysis of the risks of concurrent activities in the context of intervention by outside companies.

3.12 Risk of skill loss

3.12.1 Identification of risks and risk factors

Vigilance for key skills is part of an overall human resources policy that supports the 2025 Challenges strategic plan. Faced with legal, regulatory and technological developments as well as an increasingly competitive market, RATP Group is responsible for setting up the necessary actions for controlling the risk of skill loss for its proper functioning, development and continuity.

The company-wide strategic workforce planning initiatives are aimed at translating projected workloads into skill requirements to meet the Group's challenges and in particular to:

- ensure that the company has the right skills at the right place and the right time;
- ensure the sustainability and development of the skills required to ensure the proper operation of the Group (in particular in rail safety):
- create mobility paths that cut across the Group's various entities;
- contribute to the Group's development by providing the expected skills;
- anticipate changes, in particular changes related to digital technology and their possible consequences on skills.

3.12.2 Risk management

Four initiatives to manage the risk of skill loss, called "company-wide strategic workforce planning", have been implemented to date:

- work regarding railway safety skills is sponsored by the head of the Railway Safety unit and was initiated in 2013 and included in the 2025 Challenges strategic guidelines. The purpose of this approach is to strengthen and develop a culture of railway safety; it is based on a periodically updated inventory of the railway skills of the company's employees and on the development of action plans to prevent human risk factors in operations, maintenance and engineering activities whenever HR issues are identified; among these actions, skill development through strategic career paths and training play a central role; in this context, in 2018, a process to validate the quality of training was developed with the identification of training courses that meet these requirements and 14 strategic framework paths have been identified;
- the "operational strategic workforce plan", sponsored by the Deputy Executive Director for Transport and Maintenance Operations and launched in January 2016, aims to jointly construct a comprehensive HR policy; it supports the development of the subsidiaries by preserving the skills necessary for the competitiveness of the EPIC; its aim therefore is to prepare for an increase in employee skills to meet the challenges of tomorrow, for all of the Group's entities; in 2019, the presentation book of strategic management career paths was updated; the book of strategic master's career paths is being validated; these books will be communicated to unit human resources managers and mobility advisors in 2020; for each of the management career paths, a succession plan has been prepared.

In 2018, two new company-wide strategic workforce initiatives were launched on issues strategic for the Group:

- the strategic workforce planning for railway automation, the purpose of which is to build the skills necessary for the Group's development in automatic metro systems; it affects both line automation and the creation of automatic lines, from design engineering to operation and maintenance; its purpose is to strengthen the pool of skills to meet the Group's development projects; in 2019, an initial review of the skills of project managers and experts was organised;
- the purpose of the "technical engineering skills" strategic workforce planning initiative is to position engineering departments in the context of line extension projects and large-scale works in the Île-de-France region, or line or station modernisation programmes, to bring them up to the highest standards of operational excellence in the business line; this approach has become a strategic priority for RATP and it aims to maintain a high level of know-how and innovation; its objective is to set a target of three to five years for the skills, profiles and workforce requirements of technical engineering professions.

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. Furthermore, a specific chapter concerning the company's digital transformation strategic plan presents an analysis of the impacts of the development of digital technology on jobs and skills.

3.13 Labour dispute prevention

3.13.1 Identification of risks and risk factors

Labour conflict can originate both internally (reorganisations or employee claims) or externally (changes in legislation, pension reform or opening up to competition).

A monitoring and social alert system is continuously managed by the Labour Relations and Labour Law unit of the Labour Management and Innovation department, with daily monitoring of the labour climate, and is informed by labour relations' listening tools both internally and externally.

It provides alerts in the event of a potential conflict.

3.13.2 Risk management

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 a social alarm and concluded by an acknowledgement of disagreement.

The social alarm 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 social alarm was served.

Thereafter, and only in case of disagreement, the trade union(s) that served the social alarm 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 Île-de-France Mobilités to provide a minimum level of service at all times as much as possible.

The system continues to fulfil its purpose as a means of preventing labour disputes, as 95% of social alarms dealt with by collective bargaining did not result in strike action during 2019. This rate has remained constant from year to year.

3.14 Environmental risks

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

- a unit dedicated to sustainable development that reports to the Strategy, Innovation and Development department; this unit mobilises various teams, including:
 - a team of experts in the regulation of installations classified for environmental protection (installation classée pour la protection de l'environnement – ICPE). In 2019, this team was strengthened by the recruitment of an ICPE engineer,
- an expert in charge of air quality;
- an RATP laboratory accredited by the French national accreditation body (Cofrac);
- a toxicology unit within the Occupational Health department;
- a network of ISO 14001, ISO 9001, ISO 45001 internal auditors;
- a QHSE network comprised of teams working on quality, health and safety and the environment, from all departments;
- a safety adviser on the transportation of hazardous goods.

3.14.1 Industrial sites

3.14.1.1 Identification of risks and risk factors

Some of RATP's bus depots and maintenance workshops located in urban areas are listed as installations classified for environmental protection on the basis of the substances used or stored and the environmental risks inherent to their activities. For this reason, the prevention and control of any risk of environmental pollution is a priority for RATP.

3.14.1.2 Risk management

To control these risks, each industrial site with a significant impact on the environment is ISO 14001-certified or at the very least has an environmental management system in place. The target is ISO 14001 certification of all industrial sites by 2020. The approach is set out in the report on non-financial performance.

In addition, to ensure control of its critical environmental risks, RATP has also deployed an environmental management system for all its environmentally-classified sites as defined by French regulation.

3.14.2 Air quality

3.14.2.1 Identification of risks and risk factors

In the absence of standards for particulate matter in underground spaces, RATP's air quality efforts are focused on maintaining proper air renewal and reducing the presence of particle production inherent to any rail transport system.

3.14.2.2 Risk management

Air quality in underground spaces is measured continuously at three stations in the network. Since 2018, RATP has also provided the data in real time.

Various measures were taken to improve air quality in stations. The company launched an extensive ventilation programme in 2016-2020 to improve air exchange in its underground spaces. RATP and the Region are also focused on innovation through experimentation with new solutions. The action plan implemented is detailed in the report on non-financial performance.

3.15 Crisis management

3.15.1 Identification of risks and risk factors

For several years now, RATP Group has been undergoing a strategic transformation. This exposes it to ever-increasing regulatory compliance, the complexity of technical systems, dependence on certain partners or pressure from social networks. Such an environment may therefore increase the threats and risks that may impact the Group.

An audit was conducted by the Institut national des hautes études de sécurité et de justice (INHESJ) in 2017 which confirmed that the company had the maturity to manage exceptional "core business" situations, rail or road accidents involving passengers, in conjunction with the entire emergency and law enforcement chain. The work areas proposed thus essentially address crisis management that involves emerging or cross-functional risks in order to make it more robust.

3.15.2 Risk management

To meet these new challenges, a head of Group crisis preparedness tasked with implementing the major recommendations from the INHESJ audit was appointed in May 2018. This function reports to the Risk Management unit.

3.15.2.1 Organisation of crisis management

In addition to the actions presented in the 2018 financial and CSR report, the head of Group crisis preparedness conducted several studies with RATP's internal experts. In recent months, the Crisis Management Steering Committee has approved:

- an escalation scheme equipped with a decision support tool to classify an event as a "crisis";
- response sheets for major events based on current risk mapping: serious accidents, terrorist attacks, cyberattacks, liability due to occupational diseases, kidnapping or international epidemics;

 a proposal for the internal organisation of the strategic crisis unit, which reports to the Chairman's office.

This proposed new structure for the crisis management system is currently being validated by the Executive Committee. The new processes, alert systems and functions will be integrated into general instruction 528, which governs the Group's crisis management.

The improvements presented affect the strategic crisis unit, which integrates new functions (including the new anticipation function), roles and responsibilities.

Six specific functions are thus represented, which have mission sheets detailing the successive actions to be carried out in the alert, mobilisation and return to normal phases.

In addition, tools have been developed and made available to Executive Committee members on a collaborative platform. They allow better acculturation of the relevant managers and provide assistance in decision-making and crisis monitoring.

Finally, training in "techniques for designing and conducting crisis exercises" was provided to corporate risk owners. Exercise practice increases the robustness of the reflexes of each of the actors faced with the unpredictable and the relevance of the processes.

RATP has had the opportunity to test the real-time system on several occasions in 2019:

- first on 22, 23, 29 and 30 January for a period of heavy snow in the Île-de-France region: the implementation of crisis organisation made it possible to improve the information communicated to passengers, coordinate teams on the ground and to ensure the link with the departmental crisis units within the framework of the Îlede-France regional ice storm plan managed by the Regional Prefect;
- on 28 January for a fire that broke out in a technical building in lvry-sur-Seine, impacting the Tetra and SIEL network;
- on 5 February during a fire in signalling cables near the tracks in Vincennes: the crisis organisation was implemented to manage crisis communication related to this event and to coordinate the measures put in place to ensure continuity of service by increasing the service offering on line 1;
- from 11 to 13 February, following a collision between two trams on line T2: implementing crisis organisation made it possible to manage the crisis communication linked to that event, coordinate the involvement of the technical services and implement of alternative services for passengers;
- on 11 February for a technical incident at Gare de Lyon on RER A: the implementation of the crisis organisation improved the information provided to passengers and the coordination of teams in the field:
- on 15 July for the late completion of work between Auber and Vincennes as part of the track and ballast replacement works on RER A: crisis organisation was implemented to manage the crisis communication related to this event and coordinate the measures put in place to ensure service continuity by increasing services on metro and bus lines.

During the December 2019 labour dispute relating to pension reform, an exceptional arrangement was put in place to ensure the presence of high-level company representatives in the various crisis centres deployed by the public authorities (ministries, prefecture of police and the City of Paris). A broad mobilisation of the company's support functions was also deployed in the field to support operational staff for the purposes of passenger information and channelling.

During 2019, RATP also participated in a number of different exercises:

- on 5 June 2019, the Gigawatt exercise organized by the Regional
- on 8 October 2019, an evacuation drill on the University of Clignancourt campus:
- on 12 October 2019, an RER B evacuation exercise in partnership with SNCF and the Paris fire department in the Châtelet-Gare souterraine tunnel:
- during the night of 21 to 22 November 2019, an evacuation drill for several train sets on line 14 (fire departure simulation) between Gare de Lvon and Châtelet.

Internal mobilisation exercises were also conducted by the Permanent Support unit.

3.15.2.2 Crisis communication

The Press, Issues Management and Crisis Communications unit is integrated into and managed by the Communications department. Since 1 September, this department has been reorganised. The Media and Reputation unit integrates Issues Management and Crisis Communications. It is involved whenever a crisis arises at RATP Group.

During the year, the Media and Reputation unit was mobilised several times to perform monitoring, advisory and crisis support missions. It was present at the crisis room every time it was open.

On 22 March 2019, the Media and Reputation unit conducted a crisis exercise to test the functioning of the communication command post). The exercise simulated the derailment of a train in a metro tunnel.

The Issues Management and Crisis Communications entity took part in the Gigawatt zone exercise organised by the authorities on 5 June 2019.

Aside from crisis situations, the Issues Management and Crisis Communications entity continued its work of developing and updating arguments and communication tools for sensitive issues that have received large media coverage, in conjunction with the Press team. It also resumed major work concerning the update of communication tools relating to identified crisis scenarios, in particular by soliciting the owners of the risk concerned with regard to risk management.

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 order to prepare the company's spokespersons, the majority of the company's senior executives, including the Executive Committee, participated in a crisis media training session.

Lastly, the Issues Management and Crisis Communications unit maintains and develops its external network by having regular discussions with other companies and State departments.

3.15.2.3 Support for victims

Since 1 February 2008, the ombudsman has been appointed as a "Victim Support representative". By creating a Victim Support unit, RATP wanted to assert its desire to support the victims of accidents that occur during the day-to-day operation of its networks, by going beyond the question of responsibility and focusing solely on the human aspect. The active presence of the Victim Support representative shows victims and their families that the company is by their side.

The Victim Support representative is informed by the company when bodily injury incurs. The representative may then ask the operational unit to provide background information in order to have a good understanding of the situation and contact the victim or the victim's family by letter or through a telephone conversation to express the company's concern and provide assistance, as required. In return and where relevant, the Victim Support representative informs managers of the bus and railway operating units as well as the Legal department of the seriousness of victims' injuries and provides background information on the accident, as described by the victim. Employees involved in accidents, particularly operators, often wish to be informed of victims' conditions and progress and this information is also useful to the Legal department, which can then take a more informed approach to the compensation file and establish the amount of provisions.

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

- a crisis room:
- a presence on the scene of the accident, depending on its scope, thanks to 70 volunteers registered in the system to date, as well as a dozen or so occupational physicians. This network is set to expand. Information and awareness sessions are held throughout the year;
- the mobilisation of the customer service call centre through the opening of a toll-free line, as the case may be:
- a presence at the public information unit of the prefecture, or at the interministerial victim support unit at the Ministry of Foreign Affairs, in the event of an attack.

In addition to the humane and caring aspect of dealing with the victims or the family, the aim is to provide practical help to resolve tense situations that may arise as a result of an accident. An agreement was signed in 2016 with an assistance company which offers various aid and transport services to the victims and their family. This contract is activated on a daily basis in the event of serious accidents and is now part of the Victim Assistance unit's intervention process in the event of a collective accident or attack.

To consolidate the entire system, a general instruction (GI 554) was signed by the Chairwoman in May 2017. It mentions the historic partnership with the French institute for psychological support and resources which is incorporated into the system, both upstream and downstream. The system is divided between RATP and external operators, in particular the interministerial victim support unit, the Paris fire department, the prefecture, etc. It is also referred to in the methodological guide for the management of mass casualty incidents, updated in 2017 by the French State Secretariat for Victims.

A close relationship with SNCF enables information exchange on the respective systems.

Moreover a partnership has been established between RATP and the Fenvac (Fédération nationale des victimes d'attentats et d'accidents collectifs – national federation of victims of terrorism and collective accidents) – SOS Catastrophes et terrorisme (Disasters and terrorism) by the signing of an agreement which has been renewed annually since 2013.

An agreement was also signed in 2016 with Paris Aide aux victimes, federated by France victimes. This not-for-profit entity, arising out of the Ministry of Justice, brings together multidisciplinary professionals mobilised by the French public prosecution service and placed at the victims' disposal.

These agreements aim to contribute to the review of crisis management in the event of the occurrence of a mass casualty incident or a terrorist attack, to enhance cooperation and to help improve our system on an ongoing basis.

3.16 Financial risks

3.16.1 Identification of risks and risk factors

The Group is exposed to market risk in carrying out its operational and financial activities. Interest rate fluctuations and exchange rate risk may have an impact on Group earnings: the Group's companies have assets, incur debts, receive revenues and incur expenses in various currencies.

The Group is also exposed to liquidity risk. It manages this risk prudently by ensuring that it has sufficient liquidity and marketable securities.

Moreover, purchases of energy, consumables and commodities constitute a major source of operating expenditure for the Group's businesses, in particular diesel for road transport businesses and electricity for rail transport businesses (metro, RER and trams). The Group is therefore exposed to fluctuation in the price of these goods.

Counterparty risk is limited through the systematic use of guarantee clauses in all framework agreements related to financial instruments. Collateral (only in the form of cash) is required up to the fair value of financial instrument portfolios with each counterparty with which RATP is at risk.

3.16.2 Risk management

3.16.2.1 Corporate financing policy

Each year, RATP mobilises the resources required to finance its daily operations, capital expenditure and loan repayments. RATP uses exchanges or over-the-counter debt markets for most of its financing. RATP has several financing programmes covering both long-term and shorter-term maturities, including:

- a EMTN programme for a maximum of €6 billion;
- a negotiable European commercial paper programme for a maximum of €2.5 billion.

Ratings from Moody's and Fitch Ratings provide financial markets with assurance and visibility on RATP's credit. Short- and long-term ratings awarded by ratings agencies were as follows at 31 December 2019:

- Fitch Ratings: AA, F1+ with stable outlook;
- Moody's: Aa2, P1 with positive outlook.

RATP is pursuing its financing strategy, which seeks to diversify its investor base and internationalise the placement of its bonds:

- launch of a green bond programme (first issue in June 2017);
- presentation of RATP via international road shows.

This financing strategy was successfully implemented. In 2019, we issued a second ten-year €500 million green bond benchmark. There was huge demand for the bonds from French and international investors, demonstrating RATP's solid reputation and credit rating and the relevance of its sustainability policy. The order book reached €2.6 billion on 13 June, representing an exceptional subscription rate (more than 5 times). This resounding success made it possible to tighten the initial spread over OAT of +27 bps (+/−1 bp), enabling RATP to set the price at OAT +26 bps, for a yield of 0.381%.

The proceeds of this loan will be fully allocated to RATP's financing of three major investment projects:

- the energy transition of the network of 4,700 buses operated by RATP in Île-de-France (conversion of bus depots and fleet renewal), with the aim of introducing a 100% environmentally friendly bus fleet by 2025 that serves one billion passengers per year; this plan aims to reduce the greenhouse gas emissions generated by bus operations on the RATP network by 50% by 2025;
- the restructuring of the Ateliers de Vaugirard site, a large-scale and innovative urban mixed-use project in the 15th arrondissement of Paris that harmoniously integrates two industrial sites (train and equipment maintenance workshops), housing and green spaces; the renovation of the site will give rise to a new district organised around a new street, with around 400 housing units, half of which will be social housing, and will include a 700-m² area dedicated to urban agriculture and the largest green roof in Paris, around 15,000 m²;
- the renewal of the rolling stock on line 14, for higher-capacity, more modern and more economical trains (20% lower electrical energy consumption) to accompany the ongoing extensions of the line to Mairie de Saint-Ouen and Aéroport d'Orly.

These projects aim to achieve objectives with a high environmental impact and highlight RATP's CSR priorities: to be a major player in sustainable mobility and the smart city, reduce its environmental footprint and confirm its social responsibility.

RATP was the first multimodal transport operator in the world to obtain Afnor's "Confirmed CSR Commitment" (ISO 26000) certification in 2018, thanks to its renowned CSR practices in its historic Île-de-France area. This label awards excellent performance, particularly in terms of human resources practices, territorial anchoring and sustainable production methods.

3.16.2.2 Use of hedging instruments

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 interest rate derivatives;
- RATP uses all interest rate products (swaps, caps, floors and swaptions) to optimise its financial expenses, while complying with the micro-hedging rules set out in French accounting principles:
- all interest rate derivative instruments are matched to a specific underlying financial liability, with maturity less than or equal to the underlying.
- RATP matches fixed-rate financial liabilities with interest rate swaps to receive a fixed rate and pay a floating rate indexed to euro yield.

Given the historically low interest rates, at 31 December 2019, 92% of RATP's debt was at a fixed rate and 8% at a floating rate.

RATP may hedge its exposure to commodity price movements by using financial instruments indexed exactly to the physical delivery terms agreed with suppliers. RATP's exposure to energy price fluctuations is also largely covered by the indexation clause for its remuneration contracted with Île-de-France Mobilités.

RATP uses its €2,500 million negotiable European commercial paper programme to manage its liquidity risk. It invests surplus cash (averaging €1,300 million in 2019) in funds that enable the optimum management of cash flow fluctuations. The investments (primarily money market UCITS and term deposits with major French banks) must comply with the constraints set by management rules (quality of credit, limits, term, etc.).

3.17 Accounting and financial data reliability risks

3.17.1 Preparation of financial information

3.17.1.1 Preparation of the accounting and 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 EMTN programme. The update of this programme, made every year, is reviewed by the Statutory Auditors who issue a comfort letter.

In general, the accounting information produced by RATP meets the requirements of the Group's various management entities.

For RATP, in accordance with the provisions of the French law of 3 June 2010, Infrastructure Management and Transport Operations have a balance sheet and income statement prepared for each in the notes to the parent company's financial statements. Two separate accounting structures are dedicated to the accounting treatment of Infrastructure Management and Transport Operations. RATP's financial statements result from the consolidation of these two activities.

To prepare the separate balance sheets and income statements, the appropriate amounts have been directly allocated to the corresponding line items or flows. When this is not possible, where the line items or cash flows are managed by one or the other business activity and have initially been recognised as such, internal transfer agreements between the two activities have been implemented to invoice 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.

3.17.1.2 Preparation of parent company's financial statements

3.17.1.2.1 Accounting policies and structures

RATP ensures the segregation of duties of its accountants, treasurers and the departments authorising expenditure. This segregation of roles is entered into the IS.

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.

3.17.1.2.2 Regular controls

 Units and support functions comprising the various company departments are involved in accounting operations insofar as they authorise and engage company expenditure and revenues and define their cost accounting systems in line with the company's common accounting rules. Their contribution may be either through direct access to accounting information systems to enter data (such as external expenses – as part of the procurement flow - and income - as part of the invoicing flow), or through a local tool that is input into the information systems (as is done for inventory management, for example).

In addition to regular monitoring by the accounting teams, periodic reviews are scheduled in order to control use of IT systems and compliance with applicable procedures.

- 2. Teams from Accounting are responsible for controlling the entries made by the units in management systems on a monthly basis. They make the corrections necessary and record transactions not delegated to the units. The purpose of having a specific entity to deal with capital expenditure is to centralise in a single structure all issues relating to capital expenditure, including: accounting treatment for property, plant, equipment and fixed intangible assets; management of capital expenditure guidelines; and dissemination of capital expenditure rules and methods.
- 3. All the data that generate accounting flows are reported to the Accounting unit where summaries are prepared and centralised work is performed, such as the keeping of ledgers for property, plant and equipment, suppliers and customers, and payroll costs; accounting quality control; year-end activities and preparation of financial statements (including the balance sheet, income statement and notes, etc.).
- 4. Different controls are organised to respond to the constraints of separately accounting for the Infrastructure Management and Transport Operations activities, particularly in terms of access authorisations for accountants from either activity. Ad hoc accounting audits on accounting issues are also performed by the Accounting audit teams. Secondly, starting with the 2020 financial year, in accordance with the law of 24 December 2019 on mobility orientation, the regulation of the Infrastructure Management's activities is entrusted to the Transport Regulatory Authority (ART): within this framework, the Transport Regularity Authority will be required to issue an opinion on the accounting separation rules put in place.
- 5. The process to formalise and strengthen internal control work has been continued. This process is part of an internal control and risk management system deployed throughout the entire company in RATP Group's Finance and Management Control department as a whole by the Audit and Internal Control department.

3.17.1.2.3 Monthly reporting

The accounts are closed every month (except in January and July), at which time the accounting offices ensure that changes in expenses and income are reasonable and record closing entries. The results are also analysed by the Management Control teams.

Balance sheet accounts are also regularly analysed and justified.

3.17.1.3 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 consolidated financial statements are produced by a specific entity of the Accounting entity for the entire Group. In support of the Management Control of subsidiaries and the parent company, this entity 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 (IFRS) for the majority of the subsidiaries and making the consolidation adjustments (harmonisation of the financial statements, elimination of intercompany 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 analysed by the Finance and Management Control department. 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.

3.17.2 Internal financial and accounting control procedures

3.17.2.1 Compliance with accounting principles and legislation

3.17.2.1.1 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.

RATP applies French generally accepted accounting principles to prepare the EPIC financial statements. RATP implements a customised chart of accounts as approved by the interministerial order of 21 March 1985. The customised plan was prepared in accordance with the rules, principles and framework governing the French national chart of accounts.

3.17.2.1.2 International financial reporting standards

RATP applies IFRS standards as adopted in the European Union to prepare RATP Group's consolidated financial statements.

3.17.2.1.3 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(1). The current Statutory Auditors. Mazars and KPMG. were appointed in the 2015 financial year and for a six-year term.

3.17.2.1.4 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 programme and its risk management policy.

3.17.2.1.5 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 the 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 Greater Paris law of 3 June 2010 specified that the Infrastructure Management activity 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.

3.17.2.2 Reliability of financial information

3.17.2.2.1 Financial reporting system

RATP uses the Oracle software package to produce the parent company's financial statements and Business Financial Consolidation for the production of the consolidated financial statements. The law of 24 December 2019 on mobility orientation introduces regulation of the activities of the Infrastructure Management by the Transport Regulatory Authority (ART), starting in 2020 with supervision of the independence of the Infrastructure Management and a requirement for no discrimination between infrastructure users.

Project management support incorporated into the Finance and Management Control department enables the various software applications required for financial reporting to be managed, with the support of the IS and Telecommunications department.

Preparation of the parent company's financial statements

Monthly financial data are available after eight working days, giving time for a preliminary review of the financial information during which various controls are performed. The monthly financial data

enable management controllers in the various departments to track their level of activity and ensure targets are met. At the level of the Central Management Control department, monthly financial reporting makes it possible to manage any risks of overruns and make the appropriate adjustments to meet targets. In order to ensure that reporting deadlines are met, pre-closing financial statements are prepared at the end of May and at the end of October, respectively. The pre-closing statements are verified by the Statutory Auditors.

Preparation of the consolidated financial statements

In addition to annual reporting, the consolidated financial statements are prepared on a half-yearly basis according to a timetable set at each reporting period by the Finance department.

The production of the consolidated financial statements is managed by an entity of the 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).

3.17.2.2.2 Internal communication on procedures and best practice

The financial information made available to employees within the Finance department (management controllers, accountants, treasurers, tax specialists, etc.) 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 in an electronic document management system. These are reference documents, ranging from management principles to forms and fact sheets. All subjects related to economic performance based on AMF procedures are covered.

3.17.2.2.3 Internal accounting audits

Internal accounting audits are performed annually with the issuance of reports and follow-up action plans.

Risk management and internal control processes are deployed across the entire Finance and Management Control department.

Throughout the year, monitoring ensures that action plans are implemented and deadlines are met.

3.17.2.3 Management control of RATP

The management control function is shared by the Central Management Control department (hereinafter the Finance and Management Control 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 Mobilités agreement and department contractual objectives).

It is based on ongoing discussions between the Finance and Management Control 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 the Central Management Control department and departmental management control, which ensure homogeneity and traceability of practices.

The management cycle is used to steer the company's economic and financial performance.

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

- the four-year medium-term performance plan (starting this year until the next three years): the objective is to control financial risks and to manage medium-term economic performance, by setting productivity targets for each department and by anticipating the change in needs in the medium term, depending on the development of the offering, its projects and foreseeable changes to its environment. Consistency with the corporate strategic plan is a priority focus of analysis;
- the budget, which has a one-year framework: the key focus of analysis at this stage is ensuring consistency with each department's performance plan; verification is also performed to ensure that departments' aggregate budgets comply with company performance targets; analysis of variations from the previous year are performed on major causes, e.g. new services, productivity, management changes or new requirements, interdepartmental transfers (internal changes in scope), and price developments; changes in staffing levels are also discussed and analysed;
- monthly reporting makes it possible to monitor the execution of the year's budget for each of the departments; each department analyses changes to the seasonal budget and alerts for risks that could impact year-end conditions; consolidation at company level makes it possible to monitor compliance with the trajectory;
- monthly reporting to the Executive Committee, which was put in place in 2018, covers production objectives, service quality, financial indicators, human resources and project monitoring;
- lastly, a review of all budget items subject to specific reporting by each department and consolidation at the company level ensures that the defined trajectory is adhered to and managed.

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 with a ten-year horizon with the objective of determining upcoming capital expenditure in line with company strategy.
 This process was strengthened by means of a framing and prioritisation process for the first five years (2016-2020), in accordance with
 the capacity to be financed as a result of the agreement signed with
 Île-de-France Mobilités. This initiative also helps meet the contractual reporting requirements defined with Île-de-France Mobilités;
- the capital expenditure decision-making process: this ensures that each decision to invest is relevant and fully reasoned. It precedes the opening of accounts authorising the project launch. Major projects are submitted to the Commitments Committees prior to investment decisions;

projects 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 management of the associated impact on debt; the second half-yearly review is used to determine the budget for the following year.

3.17.2.4 Control of subsidiaries and equity investments

Subsidiaries are subject to specific controls by the 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.

3.17.2.4.1 Upstream controls

Upstream controls include:

- oversight of the activity and objectives of the subsidiaries through the preparation of medium-term strategic and performance plans;
- control of significant decision-making issues such as those concerning budgets, the preparation of financial statements, responses to calls for tenders, major contracts, capital transactions, equity investments and the founding of subdivisions within subsidiaries.

This control is exercised by each entity's Commitments Committee. 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 and budget department and maritime transport board).

Commitment Committees for the subsidiaries convene prior to Board of Directors (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 Commitment Committee (Systra) for bids on calls for tenders, contracts and acquisitions;
- the Finance Committee (RATP Dev) and Audit Committee (Systra) for budgets, half-year and annual reporting and the strategic and performance plan; 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 Committee, which for each subsidiary comprises representatives of the subsidiary's management team, RATP's Finance department and RATP's executive management.

3.17.2.4.2 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 the Audit and Internal Control department (délégation générale à l'audit et au contrôle interne – DGACI) staff.

3.17.2.4.3 Other controls

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

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

A quarterly report on the RATP Dev subsidiary is sent to the Board of Directors, which gives its opinion on the budget and strategic plan, on acquisitions and investments exceeding certain thresholds and on certain responses to calls for tenders.

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



About the report

The non-financial performance declaration complies with regulatory requirements:

- decree no. 2017-1265 of 9 August 2017;
- order no. 2017-1180 of 19 July 2017 transposing directive 2014/95/ EU amending directive 2013/34/EU.

A methodology note at the end of the declaration explains the scope and methodological limits. Cross-reference tables with international standards (UN, Global Compact, ISO 26000) and a table containing all CSR indicators are also included.

Non-financial reporting mechanism within the Group:

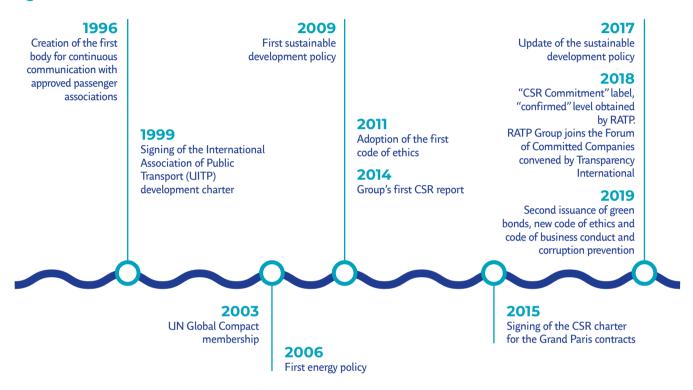
Supports	Targets
Financial and CSR report	SRI analysts and investors
Activity and sustainable development report	All stakeholders/general public
2019 green bond impact report	SRI analysts and investors
Yearly social assessment ⁽¹⁾	Analysts and experts
Website ratp.fr/"For a sustainable city" section	General public

(1) On the basis of year N-1.

Introduction

Mobility is an essential lever in responding to the increasing societal and environmental challenges in tomorrow's cities. As a privileged partner of French regions, RATP Group is actively committed, on a daily basis, to achieving a more inclusive, ecological and humane city.

Significant commitments



United Nations Global Compact membership

The Global Compact (GC), a framework for international voluntary commitment, brings together companies and organisations around ten guiding principles on human rights, labour law, the environment, and anti-corruption measures. In accordance with the requirements of the Global Compact Office, RATP Group publishes an annual communication on progress (COP) outlining its actions to comply with these principles. The Group was COP-qualified at the GC Advanced level in 2018.

This annual report acts as the 2019 COP and meets the requirements of the United Nations GC Advanced reporting level. RATP became a member of the United Nations Global Compact in 2003.





Sustainable Development Goals (SDGs)

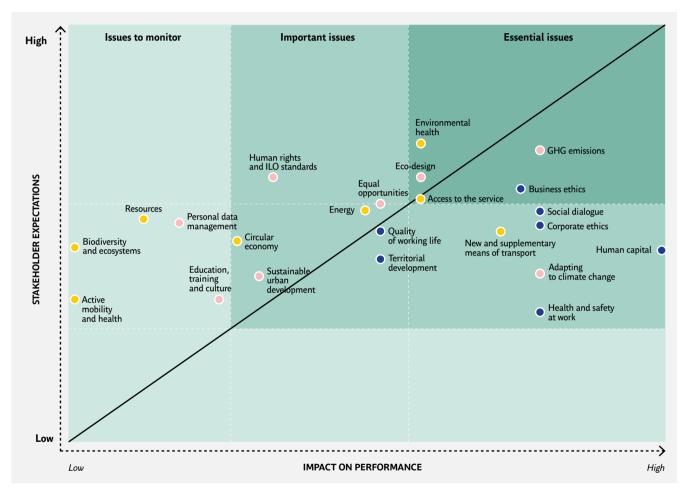
RATP Group also contributes to the UN's Sustainable Development Goals. As part of its CSR policy, it has taken action on all SDGs.



Group CSR challenges

Materiality analysis

The materiality analysis was carried out in 2017 to define the Group's CSR policy. These works were completed two years ago with an analysis of non-financial risks, which helped decide the Group's strategic focuses. This analysis led to changes in CSR reporting to meet the requirements of the non-financial performance declaration introduced by the transposition of the European directive 2014/95/EU.



- Issue associated with strategic focus 1 of the CSR policy: be a major player in mobility and sustainable cities
- Issue associated with strategic focus 2 of the CSR policy: reduce our environmental footprint
- Issue associated with strategic focus 3 of the CSR policy: confirm our social responsability

Analysis of non-financial risks

In accordance with the regulatory requirements of implementing decree no. 2017-1180 of 19 July 2017, the Group has assessed its main environmental, social, human rights, and anti-corruption risks and opportunities. The analysis was carried out in three core steps:

- 1. definition of the Group's non-financial risks environment with around forty risks and opportunities. It was established using information from the Group's risk environment, a sectoral bibliographic research, recognised reference systems such as MSCI and
- SASB(1), as well as the materiality analysis already carried out by the Group in 2017:
- 2. rating of each CSR risk and opportunity by experts in the field. The rating scale was established with the Group's general risk management delegation based on a methodology similar to the one used to establish the Group's mapping. The risks were assessed in terms of severity of impact and occurrence;
- 3. ranking of CSR risks and opportunities. Impact and occurrence assessments have made it possible to rank and identify the Group's priority risks, approved by a non-financial performance steering committee.

The main risks are as follows:

Social	Environment	Corruption	Human rights
Passenger security and safety	Environmental health	Compliance with business ethics	
Ethics health and safety at work	Change in environmental regulations		
High-quality social dialogue	Energy and climate change		Taking CSR into account in purchasing
Equal opportunities			Personal data management

The assessment of non-financial risks in 2019 significantly changed the mapping from 2018. As such, the "Quality of service and network accessibility" and "Regional anchoring" risks no longer appear as major issues for CSR at the Group level. RATP Group has decided to describe the associated policies and actions, which were identified as essential issues in our materiality analysis.

The risk management mechanisms are detailed in the risk management and internal control report. The non-financial performance declaration presents the policies, action plans, and key performance indicators in line with the Group's CSR policy guidelines.

Group CSR policy

The Group CSR policy is based on three strategies

Be a major player in mobility and sustainable cities

Reduce our environmental footprint

Confirm our social responsability

It is set out in a roadmap that is made available to our internal stakeholders and regularly updated:

- Establish a connected and accessible mobility offering
- Act in favour of environmental health
- Encourage urban integration and functional diversity
- Reduce the carbon footprint and save resources
- Develop the circular economy
- Promote continuous improvement and eco-design measures
- Contribute to the economic vitality and solidarity in regions
- Promote management that encourages staff commitment
- Ensure fair practices in its value chain

CSR policy governance

The Group's CSR policy is a performance and added value guideline, set out in the 2025 Challenges strategic plan launched in 2017.

It is based on cross-functional governance, supported by several bodies that coordinate and manage the approach:

- the Board of Directors approves the financial and CSR report on the advice of the economic and strategic committee;
- the Cersec (Comité éthique, RSE et conformité Ethics, CSR and Compliance Committee): chaired by the Chairwoman and CEO and comprising the members of the Executive Committee (Excom), the heads of the ethics, CSR and compliance functions, as well as an outside representative. As a decision-making body, its task is to develop a culture of ethics and integrity and to assess the effectiveness of compliance, corruption risk prevention and CSR action programmes;
- the non-financial performance steering committee: it consists of the directors of the finance, communications, strategy, and human resources departments, the audit and internal control department, risk management, and the RATP Dev subsidiary, all general delegates and/or members of the Excom. The Steering Committee approves the components of the non-financial performance declaration;
- the CSR Club deploys the CSR roadmap and disseminates a CSR culture within the Group through a departmental CSR contact network and coordination tools.

RATP's Strategy, Innovation, and Development department manages the CSR policy. Each of the Group's departments and subsidiaries is responsible for implementing CSR commitments.

Non-financial assessment

"CSR Commitment" label

In 2018, RATP was awarded the Afnor "CSR Commitment" label. It is the world's first transport company to have obtained the "confirmed" maturity level with such a broad scope from the first assessment. This label rewards its sustainable development performance level in its long-standing presence in the Île-de-France region.





At the request of investors, RATP Group is assessed every two years by the Vigeo Eiris rating agency. In 2019, it achieved the "advanced" level with an overall score of 66/100, up 8 points from the previous assessment. The Group is part of the "Transport and Tourism" panel, which includes 22 European companies, and ranks second in its sector.

CSR dashboard

The dashboard presents the key indicators of RATP Group's CSR roadmap covering the main non-financial risk factors and essential issues identified. The results are explained on the following pages. All corporate social responsibility indicators are published in the table of indicators at the end of the non-financial performance declaration.

STRATEGIC FOCUS 1: BE A MAJOR PLAYER IN MOBILITY AND SUSTAINABLE CITIES

Associated CSR ris	k KPI	Scope	Target	2019 value	Trend
	Network protection and security officers (groupe de protection et de sécurité des réseaux – GPSR) average daily on-duty time in networks (shift hours/day)	RATP	-	587	•
Security and safety	Trends in rail network accidents (number of accidents per year per million commercial kilometres)	RATP	-	11.51	•
	Trends in Bus network accidents (accident rate per 100,000 km)	RATP	-	6.58	
	Passenger satisfaction rate Source: Île-de-France Mobilités perception survey	RATP	-	82%	
Quality of service	Percentage of buses accessible to people with reduced mobility (Île-de-France)	RATP	100% before 2022	85%	•
and network accessibility	Percentage of RER stations accessible to people with reduced mobility (Île-de-France)	RATP	100% by 2021	98.5%	
	Percentage of assistance staff in stations trained to assist people with mental disabilities	RATP	100% by 2020	72%	•
	Particulate matter levels in the 3 underground stations on the Squales network (average concentration of PM10 particles in µg/m³)	RATP	-	76	
	Number of people exposed (noise black spots)	RATP	0 by 2020	334	
Environmental health	Number of noise- and vibration-related complaints and claims	RATP, RATP Dev,RATP Real Estate	-	673	•
	Percentage of rolling stock with a low noise level (bus, trains)	RATP	_	53%	•
	Number of electromagnetic field measurements carried out during the year	RATP	_	268	•
	Percentage of industrial sites ISO 14001 certified	RATP	100% by 2020	96%	
Compliance with changes in environmental regulations	Number of industrial sites ISO 14001 certified	RATP, RATP Dev	_	91	•
	Number of ICPE formal notices	RATP, RATP Dev	0	0	

STRATEGIC FOCUS 2: REDUCE OUR ENVIRONMENTAL FOOTPRINT

Associated CSR risk	KPI	Scope	Target	2019 value	Trend
Energy and climate	Reduction in energy consumption per passenger.kilometre compared to 2015	RATP	-20% by 2025	8%	
change	Reduction in greenhouse gas emissions per passenger.kilometre compared to 2015	RATP	-50% by 2025	13%	

STRATEGIC FOCUS 3: CONFIRM OUR SOCIAL RESPONSABILITY

Associated CSR risk	KPI	Scope	Target	2019 value	Trend
Social conflicts	Conflict rate (number of days off work due to strikes/average number of employees)	RATP	-	4.42	•
	Percentage of women in senior management	RATP Dev	30% by 2022	30.9%	
Equal opportunities	Percentage of women in the total workforce	RATP Dev	20% by 2022	14.8%	
	Percentage of women recruited	RATP	23% by 2021	21.5%	
	Number of employees awaiting reclassification following a decision regarding permanent incapacity to exercise their work functions	RATP	Halve by 2020 (compared to 2015)	265	•
Occupational	Occupational accident frequency rate (number of occupational accidents with time off work x 1,000,000 / number of hours worked)	RATP	Halve by 2020 (compared to 2015)	30.12	•
health and safety	Occupational accident severity rate (number of days lost due to occupational accidents x 1,000 / number of hours worked)	RATP	Halve by 2020 (compared to 2015)	2.84	•
	Percentage of operational units ISO 45001 certified	RATP	100% by 2020 (compared to 2015)	60%	•
Business ethics	Number of alerts	RATP	2018 data not available	50	New indicator
	Rates of assistance provided to homeless people in directing them to social support services	RATP	-	71%	
Regional anchoring	Number of direct and indirect beneficiaries of the Foundation's projects	RATP Group	-	80,885	•
	Number of direct, indirect, and induced jobs resulting from RATP businesses	RATP	-	128,000	•
	Number of beneficiaries of the Ateliers mobilité®	RATP	3,000	3,138	
Taking CSR into account in purchasing	Amount of solidarity purchases (in millions of euros)	RATP	€1.4 million by 2020	1.3	•
Personal data protection	Number of notifications sent to CNIL (French Data Protection Authority) in the event of personal data breaches	RATP Group, excluding RATP Dev and RATP Smart Systems	-	1	

Result achieved or exceeded with regard to the target or positive trend.

Result not achieved with regard to the target or negative trend.

Innovation for sustainable cities

Designing tomorrow's mobility for sustainable cities is a real challenge for public transport operators. Innovation underpins the Group's strategy with a view to better meet customer expectations and speed up the energy transition, in which it is a key player through its Bus2025 plan. The Group has implemented an innovation approach based on major thematic programmes:

• smart city: RATP Group launched a promising research programme aiming to explore new value fields. The two industrial demonstrators for the sustainable city launched in 2018 allowed for the identification of new value pools with regard to data from cities, as well as the definition of associated economic and governance models. RATP Group and the Massachusetts Institute of Technology's (MIT) Senseable City Lab launched an international research programme with regard to the optimisation and management of the city's physical spaces.

To become a privileged partner of smart cities, RATP Group is also counting on the development of multimodal digital services through mobility as a service (MaaS), which notably enables the purchase of transport tickets or mobility services (carpooling, self-service bicycles, etc.):

- autonomous vehicles: in 2019, the Group continued its development and trials with autonomous shuttles and smart garage operations to grow on the most demanding pathways and contribute to the national effort in order to guarantee the safety of autonomous vehicles financed by Agence de l'environnement et de la maîtrise de l'énergie (Ademe French environment and energy management agency);
- artificial intelligence: in 2019, the artificial intelligence programme that began in 2018 took off. The main focuses aim to improve operational excellence and customer experience: optimised network control, more proactive and efficient maintenance, engaging and personalised customer experience, heightened sense of safety, etc. The second year saw the emergence of the first major projects contributing to the top-to-bottom transformation of the Group:

• air mobility, a new way to share public space: responding to increasingly dense cities, to the overloading of existing infrastructures, to the issues of sharing roads, and to the absolute need to (re)plant greenery, making use of public airspace is an increasingly obvious solution. RATP Group has entered into two partnerships to develop new forms of mobility adapted to the specific needs of cities and dense urban environments using cable car services with Poma and Eiffage, and by exploring the feasibility of air-taxi type mobility services in Île-de-France with Airbus and ADP.

RATP Capital Innovation: investing in new mobility solutions and smart cities

In order to take part in the emergence of new business models and technologies for new forms of mobility and smart cities, in February 2017, RATP Group created RATP Capital Innovation, an investment fund dedicated to start-ups and innovative companies. RATP Capital Innovation has invested in the following companies: Communauto, a car-sharing service company; Klaxit, a home-to-work carpooling platform; CityScoot, a leader in self-service electric scooters, and Zenpark, a leader in shared and pooled car parks.

In 2019: 5.2 million journeys using new forms of mobility (self-service scooters, carpooling, and car sharing offered through our acquisitions).

The Group implements numerous participatory innovation programmes. In 2018, it also created its "Urbanopolis" labs network, which brings together six innovation centres in France and Morocco to promote collective intelligence and ground-breaking innovation, and provide support to speed up the company's priority innovation projects.

Since 2014, RATP Dev has hosted the "Innov & Go" challenge every two years. It rewards the most innovative ideas that bring added value in economic, environmental, and social terms, and can be replicated in other Group subsidiaries. In 2018, for example, 134 ideas were submitted by 739 participants from 33 subsidiaries. The next challenge is set to take place in 2020.

CSR policy strategic focus 1: Be a major player in mobility and sustainable cities

RATP Group calls on its expertise in public transport to invest in many measures to ensure smooth journeys for all its customers. The Group seeks to make each passenger's daily life easier by offering a high-quality, safe, accessible, and sustainable transport solution.

The existing policies outlined below allow us to address the main risks and issues identified:

- passenger security and safety;
- quality of service and network accessibility;
- environmental health.

Guideline 1.1 — Establish a connected and accessible mobility offering

Safety, an absolute priority

Passenger security and safety underpin the commitment of RATP Group and its subsidiaries. Rail and road safety are the cornerstone of the Group's business. They are ever-present in all its aspects worldwide. All Group entities work daily to prevent accident risks, identify areas for improvement along with all stakeholders, and raise awareness among all audiences as to how to properly use the networks.

Our commitments, policies, and actions

Continually strengthening rail safety procedures

Reporting directly to the Chief Executive Officer and Chairwoman, the Railway Safety unit oversees the conditions under which all RATP Group entities take responsibility for rail safety. A description of Railway Safety unit's organisation is included in the internal control and risk management section of this report.

The Railway Safety unit carries out rail safety audits, both within RATP and its subsidiaries, to monitor all activities that may affect passenger safety.

The rail safety policy is implemented through continuously ensuring operating safety and monitoring the quality of manufacturing and service, in order for customers and the community to have access to the safe service they expect, and for its staff members to safely carry out their tasks. The rail safety policy is constantly reviewed to be adapted to organisational changes.

To ensure the sustainability of rail safety expertise, RATP provides training to all staff members required to perform safety-related tasks: drivers, regulatory managers, supervisory staff, maintenance staff, and signallers.

RATP Dev has also developed its own safety policy in cooperation with the Railway Safety unit.

The Group also makes its recognised expertise in rail safety available to French, European, and international authorities by:

- sharing its expertise with government services by contributing to the deployment of the new decree no. 2017-440 (participation in drafting application guides), and to the transposition of European directives on rail interoperability and safety;
- participating in the work of European bodies, within the framework of the M/486 European mandate, aimed at tailoring and creating standards for mechanical, electrical, and electronic applications in the urban rail field (metro, tram);
- contributing to drafting the UITP's Knowledge Brief report aimed at addressing organisational and human factors in rail safety.

Strengthening road safety

Road safety is subject to a great number of external factors and is inherently difficult to strengthen. It is the subject of a Group policy and an ambitious action plan.

Road risk is described in the internal control and risk management section of this report.

The issues associated with road safety are essential in view of the large number of drivers (16,000) and the fleet of over 4,700 buses that drive through the dense urban network in Île-de-France every day.

The company has been committed to implementing responsible driving and accident prevention for many years. Initiatives to prevent unsafe behaviour are taken with regard to bus drivers and relevant stakeholders.

The road safety policy mainly relates to the safety of passengers, of the general public who share the road with RATP buses, and of RATP employees. The policy also focuses on the improvement of transport performance, and the internal and external promotion of best road safety practices. Another important issue for this policy is to make road safety a unique asset of RATP's service offering to prepare for the opening up to competition, and to cement the company's role as a privileged partner of transport authorities.

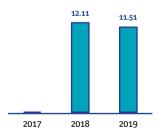
In 2019, RATP became the first passenger transport company in France to obtain ISO 39001 certification. This certification covers road safety management for RATP EPIC's surface passenger transport network.

RATP Dev has set up a safety committee, bringing together safety experts to promote the sharing of experience between subsidiaries. The committee meets regularly to coordinate rail and road safety strategy, discuss best practices, and study feedback. The committee met in July 2019 in London for two days of discussion and exchanging ideas. 16 safety experts shared their experiences.

The subsidiaries also have a road/rail safety policy that includes a number of initiatives implemented in the various countries where they operate. Internal control allows the company to assess the relevance, the quality, and the effectiveness of the processes stemming from it. The audits regularly carried out by the experts from RATP Dev head office ensure that subsidiaries comply with directives and policies thus ensuring the safety of passengers and staff members. These audits are carried out in collaboration with RATP Group's audit and internal control management.

> Key indicators

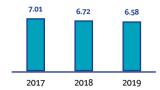
Trends in rail network accidents - RATP



Number of annual accidents reported per million commercial kilometres

The 2019 results for the rail network accident indicator for metro/ RER/tram lines combined are stable overall compared to 2018, the majority still being individual passenger incidents. The indicator now only accounts for those individual passenger incidents that were subject to an intervention by the emergency services. To address this kind of incident, RATP is continuing to roll out, among other things, campaigns to prevent behaviour that presents risks to passengers (passengers falling, being bumped, trapped, etc.).

Trends in Bus network accidents - RATP



Total number of accidents per 100,000 kilometres

Bus network accidents have continued their downward trend since 2017. Contributing to this improvement are: the roll-out of accident rate action plans in meetings of the Operational unit, the Management Committee, or executive management through the operational excellence programme and the monitoring of major projects in the strategic plan, and the ISO 39001 certification process.

Raising public awareness

Raising passenger awareness regarding risky behaviour is an important issue. RATP has launched several communication campaigns on behaviour aimed at reducing the number of serious accidents related to passengers' lack of vigilance.

The AMY app developed by RATP warns of the imminent arrival of a bus or tram through ultrasound alerts sent to pedestrians' smartphones. The goal is to prevent collisions and protect pedestrians who are distracted by their smartphones. After having tested it on the Trans-Val-de-Marne bus route, RATP has recently launched a trial of the app solution on the T8 line. The app won the Road Safety Innovation competition in Montreal on 14 November 2019.

RATP Dev has deployed a number of dedicated road safety operations through awareness-raising days for drivers in its subsidiaries in France. These days dedicated to raising awareness are gradually being set up abroad.

Working in cooperation with all regional stakeholders

To better identify the most accident-prone areas, RATP Group works in cooperation with law enforcement agencies and local authorities to share and find the safest possible road development solutions. In particular, RATP participates in working groups with the police prefecture and the City of Paris regarding the most accident-prone sites. Over the last several years, RATP has thus strengthened its road safety management.

For the European Mobility Week, the Bus department manned a stand to raise awareness about sharing the road together, alongside the Ministry of the Interior and the Paris police prefecture. This initiative allowed the company to talk with the general public about blind spots and sharing the road (use of pedestrian crossings, overcrowding at junctions, behaviours for pedestrians to adopt, etc.).

In Morocco, the three-year agreement signed in 2018 with the National committee for the prevention of road accidents Comité national de prévention des accidents de la circulation and RATP Dev Casablanca allowed the subsidiary to fund a range of actions (raising awareness, communication, research, innovation) to improve the safety of trams in the urban environment. Thus, the campaign to raise awareness about road safety involved 19,140 students from 40 primary and secondary schools between its roll-out in 2018 and the inauguration of the T2 line in January 2019. Visits to sports associations were also arranged (awareness raised among 11,000 young people).

Embodying sustainable mobility and smart cities for our passengers

RATP remains attentive to customer expectations and aims to continuously improve its quality of service. To create a relationship of trust with its customers and offer services increasingly tailored to their needs, the Group has made the passenger experience a priority. The Group takes initiative to improve accessibility, reception, reliability, comfort, and cleanliness in its trains and stations. Its service policy, based on proximity, simplicity, and innovation, is in line with this goal.

27,000 network staff members in contact with customers415 metro and RER contact points

> Key indicator

Passenger satisfaction rate ⁽¹⁾	2017	2018	2019
RATP	81.40%	80.60%	82%

(1) Results of the \hat{l} le-de-France Mobilités perception surveys.

Île-de-France Mobilités perception surveys rely on a range of assessment criteria. They all improved in 2019, which explains the improvement in the passenger satisfaction rate. It should be noted that Île-de-France Mobilités discontinued the perception surveys during the disruption caused by the strikes. Consequently, the impact of the December 2019 industrial action on passenger satisfaction has not been measured.

Our commitments, policies, and actions

Offering innovative, digital technology services

In response to passenger digital habits, RATP Group is investing in social media to enhance its visual and audio announcements. The Group operates Facebook, Instagram, and several Twitter accounts. The digital tools developed by the Group improve ways of informing and communicating with passengers in real time.

In an increasingly connected world, the Group designs ticketing solutions tailored to new uses and developments in mobile technologies in order to improve the passenger experience.

The RATP Smart Systems subsidiary promotes the Group's expertise in smart transport systems, particularly in ticketing in France and abroad.

RATP Group is committed to developing new connected mobility solutions to offer passengers an increasingly personalised, fluid, and "door-to-door" journey. As of the end of 2019, over 90% of the metro and RER network is covered by 3G/4G. Moreover, Wi-Fi hotspots and 415 "connect points" (ticket offices and information counters) in stations and tourist areas support this service offering.

As part of its digital services development strategy to make passengers' daily lives easier, RATP is gradually implementing a programme for upgrading the ticketing system led by Île-de-France Mobilités. This translates into the roll-out of a new ticketing service for customers:

- smartphones help to cut down on queuing. It is now possible to buy transport tickets using a smartphone. Customers can choose to put them on their Navigo pass or store them in their phone for travelling;
- a new smart card, the Navigo Easy, now allows people to use t+ tickets and day passes. Navigo Easy is an alternative to magnetic tickets;
- the Navigo Liberté + service lets people pay for all of the previous month's journeys in one direct debit. It has been gradually rolled out across the board from September 2019 and will get even better in spring 2020 with the addition of the reduced fare.

At the end of 2019, there were 42,000 subscriptions to the Navigo Liberté + pass (all transport operators combined) and 435,000 Navigo Easy passes sold, 90% through RATP.

Also at the request of Île-de-France Mobilités, RATP Group has developed a mobile app allowing Île-de-France residents to organise their journeys from start to finish through the integration of ten or so mobility services providers. Launched in November, this app is called "MaaX" for mobility as an experience.

At the beginning of 2019, RATP Group launched its first MaaS solution in Annemasse by developing a new version of the TAC Mobilités mobile app that collects theoretical and/or real-time public transport information in the greater Annemasse (TAC network, car sharing, and SNCF) and Geneva areas (transports publics genevois – TPG and CFF networks) to provide a multimodal service. The new version offers a single gateway to real-time local travel options covering complementary transport modes: TAC and TPG public transport, carpooling, taxis, and parking spaces in real time. It also offers online purchasing of e-tickets (Tickizz) for the TAC network, already available on another app since autumn 2017.

In November 2019, RATP Dev launched Slide, an on-demand bus service, in Ealing, west London. Implemented for twelve months, the goal of this project is to encourage motorists to get to work using sustainable mobility alternatives.

Casaroc, RATP Dev's innovation lab based in Casablanca and dedicated to passenger service, launched a trial of the Be Salam app on the city's tram network.

This anti-harassment solution, driven by students from Emines Ben Guerir (school of industrial management), provides a preventative aspect (walking buddy) and a more corrective aspect with a real-time warning system.

Creating close relationships with passengers

RATP Group places its passengers at the core of its focus. Several measures have been implemented to record their expectations and needs and meet them:

- mystery passengers: almost 3,500 mystery passengers survey the network, audit situations encountered, and collect passengers' opinions:
- human presence on the Île-de-France networks: almost 5,300 staff members are deployed in stations to greet, inform, and guide passengers during their journeys and assist them in the event of a disruption. Service relations underpin their training.

Real-time passenger information

Real-time passenger information is one of the main passenger expectations in terms of quality of service. Several measures have therefore been taken to ensure optimum passenger information tailored to everyday situations on metro lines (additional displays in stations, on trains and buses). In the event of disruptions on the network, the driver informs passengers directly.

In 2019, the Syspad project was launched to replace the current service information boards in the 35 RER line A stations by 2021. They have been installed in virtually all the stations on the central section as well as in a large number of the West branch stations. The roll-out will take place until 2021 in all of the line A stations operated by RATP.

Improving tourist assistance

The 5,300 station staff members pay particular attention to tourist passengers all year round. Every year, the Île-de-France region welcomes over 45 million tourists. They represent 10% of RATP's passengers on average. The Île-de-France network does everything in its power to make their journeys easier, in particular by developing appropriate smartphone apps (RATP created an RATP Wechat account in 2017, and has displayed flash codes to access information for a large number of metro, RER, and bus stations).

400 station staff members ("green vests") are also dedicated to assist these visitors. RATP has installed 60 Zenway touch screens in the metro and RER stations that tourists use the most. These screens allow people to find the simplest route and access information about the station's surroundings (tourist spots, etc.).

Offering clean, modern stations

Train and metro station cleanliness is high on the list of passenger expectations. This is a major challenge for the Group given the size of its network and the number of visitors. RATP Group, together with the Île-de-France region and Île-de-France Mobilités, has launched a specific plan to promote the cleanliness of the network operated by RATP. The budget for this plan was €2 million in 2018, then €5 million per year to be allocated between 2019 and 2021. This plan comes in addition to the €85 million that Île-de-France Mobilités contractually allocates to RATP each year to improve passenger comfort and experience.

These investments make it possible to finance new initiatives: doubling the number of toilets in stations, "nudge" devices to encourage behavioural change, odour treatment, thorough cleaning of stations, increased presence of cleaning staff members during the day and collecting passenger reports of cleanliness problems through the RATP smartphone app.

The spirit of innovation also plays a key role in improving the quality of passenger traffic areas. The start-up Fybots, winner of the RATP Lab at the 2017 Viva Technology show, signed an agreement with the Group to implement an experimental approach to deploying an autonomous floor cleaning machine. These are new forms of technology adapted to cleaning large surface areas used by high flows of passengers. The first robots were put into service in 2018, notably in Gare de Lyon.

Combating feelings of insecurity in public transport

In a context of heightened vigilance, the Group works every day to ensure passenger, staff, and property safety. RATP is one of the only urban transport operators to have an internal department, the network protection and security Group (groupe de protection et de sécurité des réseaux - GPSR). Safety is a component of its public service mission:

- contributing to passenger safety is a public service requirement;
- ensuring the safety of staff and facilities is a way of providing service continuity.

RATP essentially takes action in two main prevention areas:

- situational prevention, to reduce passengers' sense of insecurity;
- social prevention, through youth awareness-raising initiatives, particularly in schools.

Our commitments, policies, and actions

An organisation for deterrence and intervention

Over 1,000 GPSR officers, or RATP Security, are responsible for protecting, assisting, and ensuring passenger and staff safety on all bus, metro, RER, and tram networks. Over a hundred teams are deployed 24 hours a day, 7 days a week.

In order to cover the entire network and thereby provide the greatest possible efficiency, GPSR works with police forces, in particular the police prefecture's brigade des réseaux franciliens, in a complementary and coordinated way through joint operations aimed at managing the region.

When it came into force, law no. 2016-339, known as the Le Roux Savary law of 22 March 2016, on "the prevention and fight against incivilities, attacks on public security and terrorist acts in public passenger transport", also allowed RATP's internal safety services to trial the use of pedestrian cameras. This experiment involved about fifteen pedestrian cameras between 3 December 2018 and 31 December 2019. It covered both the rail and surface networks. Its objective was to make the GPSR's interventions safer with a system that is both preventive, in deterring perpetrators of violence against staff members, and repressive, as it allows the collection of evidence.

The adoption of the framework law on mobility allows for the trials of the cameras to be extended for GPSR officers and validates the proposal to equip RATP's security officers so that they too may test this device (article 32 bis of the framework law).

RATP also has alert systems and resources to ensure passenger safety. All RATP staff members working in the network's stations can be mobilised directly through emergency call points installed in RATP network stations. They can alert RATP's security command post at any time.

Videoprotection is an essential tool in the security chain, in addition to dense, responsive human presence. Over 50,000 cameras are installed in the trains, on the platforms, and in the corridors of the RATP network.

After eighteen months of trials with sniffer-dog teams to detect explosives, and with regard to the very positive results on traffic flow, RATP has maintained this arrangement and expanded its scope to 31 RER stations and all metro stations. After one year of gradually implementing this arrangement and integrating the pooling of resources between SNCF and RATP in large multimodal hubs, each report of traffic interruption is now for 35 minutes on average compared to 38 minutes in 2018. And this in spite of an 8% increase in reports of unattended baggage compared to the January to October 2018 period.

Supporting action taken by public authorities

The risk of attacks is a central issue in political, societal and media concerns. RATP is committed to preventing and dealing with the consequences of terrorist threat while supporting actions taken by public authorities (adapting the positions taken by Vigipirate and applying the measures stemming from them, notably by participating in research projects).

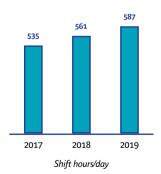
The Le Roux-Savary law enhances RATP's preventive actions in terms of recruitment and internal mobility in jobs involving the safety of property and people.

Prevention and awareness raising to reduce risks and incivility

The Group is committed to a prevention policy alongside institutions, local authorities, associations, and the national education system to raise awareness among public transport users of the importance of social harmony and properly using the network. In March 2018, RATP, the Île-de-France region, SNCF Transilien, and Île-de-France Mobilités launched a joint communication campaign against harassment on public transport: "Ne minimisons jamais le harcèlement sexuel" (Never minimise sexual harassment), aiming to raise passengers' awareness of this issue and involve them in preventing and dealing with this type of behaviour. This communication campaign was renewed in January 2019 with the message "Contre le harcèlement dans les transports en commun, alertez!"(Stand against harassment on public transport. Report it!). It aimed to publicise or remind people of the tools and methods for reporting harassment: tell a staff member, use a call point, or use the hotlines (call 3117, text 31177, use the 3117 app).

> Key indicators

Average amount of time worked daily by RATP's network protection and security officers



This indicator increased in 2019 as the average amount of time worked daily associated with the number of teams deployed on the networks was higher. Due to the request on behalf of Île-de-France Mobilités, staff numbers rose regularly to reach an increase of over 100 FTE for the duration of the contract.

For a more inclusive society: inclusive mobility access, a human and technological challenge

According to the World Health Organization, 1 billion people, or 15% of the world's population, live with some form of disability, whether it be a motor, sensory (visual, auditory), psychological, or mental disability. Mobility is an essential factor for well-being and inclusion in society.

Public transport accessibility is therefore a major challenge for both society and RATP Group. To ensure everyone has access to public transport, in particular people with disabilities, the Group has been committed for over twenty-five years to working with all stakeholders involved – associations, staff, local authorities and passengers.

RATP's actions are governed by the law of 11 February 2005 and comply with the framework set by the accessibility master plan (schéma directeur d'accessibilité) drawn up in 2009 by STIF (Syndicat des transports de l'Île-de-France, now Île-de-France Mobilités). As a reminder, the legislation imposes a duty to achieve specific results on public transport services with accessibility planned for 2015, with the exception of any underground rail and guided transport networks existing on that date.

100% of the Paris bus network (85% in Île-de-France) is accessible to wheelchair users

100% of tram lines are accessible to people with reduced mobility

98.5% of RER stations are accessible to people with reduced mobility

Metro: line 14 is 100% accessible to people with reduced mobility. The extension works on lines 4, 11, 12, and 14 will make these future stations accessible to people with reduced mobility

Audio and visual announcements in **100%** of buses, trams, and RERs, 52% of metros, and 98% of stations

S3A label: 10 metro lines (1, 2, 5, 6, 7-7bis, 9, 10, 11, 12, 14), RER lines A and B, bus routes 151 and 251,

and customer service have been awarded this label

Line 1 is labelled "Cap'Handéo, services de mobilité" for providing assistance to people with mental, psychological, auditory, or visual disabilities. RER suburban line A. which is accessible to wheelchair users, has been awarded the label within a wider scope with regard to people with motor disabilities. Metro line 13 and tram line T8 have also obtained the label as of December 2019 (line 13) outside of wheelchair scope)

64 of the 65 RER stations are accessible to wheelchair users with personalised, real-time assistance The equipment for making Luxembourg station accessible was unveiled in July 2019

Our commitments, policies, and actions

Ongoing dialogue with associations

To implement appropriate accessibility solutions, RATP maintains ongoing dialogue with all accessibility stakeholders: associations, staff, local authorities and passengers. It regularly works in close cooperation with them on projects, in particular with representative associations.

Every month, RATP organises meetings with the accessibility advisory committee (Comité consultatif de l'accessibilité - CCA), which includes nine representative associations(1). In order to discuss ongoing projects and find common solutions, these meetings are led directly by the Group's Chairwoman and Chief Executive Officer once or twice a year.

The works to make Luxembourg station on RER B accessible to people with reduced mobility were completed in 2019. This was the second-to-last remaining station in the RATP RER network to undergo accessibility works. On this occasion, the CCA celebrated its 10th anniversary on 19 June 2019 at the Musée du Luxembourg. The associations were invited to explore the equipment dedicated to accessibility (audio waypoints, guidance and warning bands, interception bands, lifts, etc.) set up in the station.

New solutions

Facilitating mobility also means providing accessible information. Many projects aim to provide the information required for a journey with audio and visual information. Equisens, launched in 2015, is a cooperative project to adapt metro and RER stations to simplify passenger guidance through audio announcements, and visual and touch-screen devices. They provide assistance in identifying different services, increasing walkway safety and providing easier access to information. The aim is to equip all metro and RER stations by 2020.

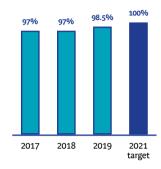
The audio companion is a guidance app for people with difficulties finding their way around. It is designed to help them reach an exit. platform, or station. After a successful trial phase at two stations (Bastille and Pyramides), a first roll-out is underway throughout line 11 stations. This operation is driven by line staff members who feed "routing" data into the app. After a verification phase with the locomotion centre of the Institut national des jeunes aveugles (national institute for blind youth), the "user test" phase is set to start in February 2020.

Social inclusion is a major focus of RATP Dev's CSR policy around the world. In Hong Kong, for example, the Hong Kong Tramways subsidiary (HKT, a joint-venture operation with Transdev), is in regular contact with the relevant authorities and associations working with people with disabilities. The local teams are committed to better understanding the specific constraints and needs of people with disabilities in order to adapt equipment and services as much as possible (improving signage visibility, accommodating guide dogs, etc.).

For the 2019 International Day of Persons with Disabilities, HKT provided free tram journeys to people with disabilities and those accompanying them. And in recognition of the elderly's contribution to society, HKT also offers free tickets to people over 65 years of age who have a "Senior Citizen" card.

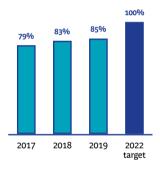
> Key indicators

Percentages of RER stations in the Île-de-France region accessible to people with reduced mobility - RATP

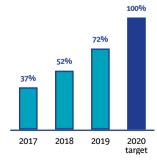


Works are currently underway to make the remaining station, La Croix de Berny, accessible to people with reduced mobility. 100% of RER stations operated by RATP will be accessible to people with reduced mobility in 2021.

Percentages of bus routes in Île-de-France accessible to people with reduced mobility - RATP



Percentage of assistance staff in stations trained to assist people with mental disabilities (S3A label) - RATP



Over the past three years, there has been a steady increase in the number of bus routes accessible to people with reduced mobility and in the number of staff members trained to assist people with mental disabilities. 10 metro lines in Paris are involved in the accessibility approach.

⁽¹⁾ AMF (Association française contre les myopathies – French association against myopathy), Allegro Fortissimo (fighting discrimination against the obese), APF (Association des paralysés de France – French association for the paralysed), APPT (Association des personnes de petite taille – French association for short individuals), Corerpa (conférence régionale des retraités et personnes âgées – regional conference for the elderly and retired), CFPSAA (Confédération française pour la promotion sociale des aveugles et amblyopes – French confederation for the social promotion of the blind and individuals with amblyopia), Unafam (Union nationale des familles et amis des personnes malades et/ou handicapées psychiques – French union for the families and friends of individuals with psychological disabilities and/or disorders), Unapei (Union nationale des associations de parents et amis de personnes handicapées mentales – French union for associations of parents and friends of individuals with mental disabilities) and Unisda (Union nationale pour l'insertion sociale du déficient auditif – French union for the social integration of individuals with hearing disorders).

Guideline 1.2 — Environmentally-friendly actions

Making station air quality an environmental priority

As an operator of an underground transport network, RATP faces the challenge to continuously improve air quality in stations, and provide a warm, dry environment with a high level of air renewal and a low rate of nitrogen oxide stemming from external pollution. Particulate pollution, which is caused by rolling stock braking systems, is present in all rail networks worldwide. Although there are currently no standards regarding particulates in underground spaces, RATP has taken a series of initiatives as part of a proactive approach to reduce the amount of fine and micro-particles in the air.

€56 million invested over the 2016-2020 period to improve tunnel ventilation

341 tunnel fans

Our commitments, policies, and actions

Daily monitoring of air quality

For over twenty years, RATP has continuously monitored the air quality in its underground spaces. Measurements are carried out using reference analysers by the RATP laboratory, which is certified by Cofrac. Since 1997, the laboratory has been carrying out continuous measurements in three stations typical of RATP's underground spaces: Franklin D. Roosevelt (metro line 1), Châtelet (metro line 4), and since 2006 in the Auber RER station (RER line A). They form the Squales (Surveillance de la qualité de l'air de l'environnement souterrain – monitoring of air quality in the underground environment) measurement network.

Measurements at these stations include temperature, relative humidity, carbon dioxide, oxides, and particulate matter. Since 2018, passengers have been able to consult all this data in real time via the dedicated website set up by RATP. Ad hoc measurements at various points in the underground network reinforce this continuous monitoring.

Tangible actions for continuous improvement in air quality

Improving indoor air quality mainly involves improving air renewal in stations and optimising the electrical braking of rolling stock to reduce particulate emissions. Air renewal is a crucial factor for improving air quality in stations. RATP has also been implementing a major investment plan worth €56 million (2016-2020) to create, renew, and improve mechanical ventilation for underground air renewal. In 2019, a fan was added on metro line 10. Comfort ventilation capacities have been upgraded on nine ventilation stations.

Regarding the infrastructure maintenance trains, 12 completely electric motor tractors, which will replace the old diesel ones, will be gradually delivered across the RER network at a cost of €42.85 million. The metro network already has motor tractors using completely electric propulsion.

RATP is also testing a solution to improve air quality, proposed as part of the "Innovons pour l'air de nos stations" (Innovating for the air in our stations) call for proposals launched by Île-de-France Region in 2018.

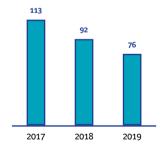
Since June 2019, RATP and the Suez company have installed positive ionisation filtration devices at Alexandre Dumas station (line 2). RATP and Airparif, who have gotten involved to measure air quality during the trial period, are assessing the effectiveness of this solution.

Health monitoring

In 2018, RATP also continued the mortality cohort survey initially conducted over the 1980-1999 period and extended it to the 1980-2012 period. A five-year extension, covering the following five years until 2017, was decided. This survey makes it possible to study RATP employees' death rates and their causes and compare them with those of the Île-de-France region's population. An overall undermortality of RATP employees is observed. As part of its occupational health policy, RATP's Occupational Health department launched a cooperative project in 2018 on indicators for biological exposure and effects (biomarkers) from exposure to air that comes from underground railway environments. This project is called "the Respiratory disease Occupational Biomonitoring Collaborative Project", ROBoCoP, and is carrried out with the Institut de santé au travail de Lausanne. This project reflects the Group's desire to assess any potential biological effects of metal particles in underground railway environments in order to prevent them effectively.

> Key indicator

Particulate matter levels in the three stations on the Squales network – RATP



Average concentration of PM10 particles in µg/m³

The level of particles has been decreasing since 2017. It should be noted that Châtelet and Auber stations were closed for renovations in 2018 and 2019, respectively. As such, no reading was taken for the particulate matter level in 2019 in Auber station.

Reducing noise and vibration pollution

Based in the city, RATP aims to minimise noise and vibration effects on its passengers, local residents and employees by taking steps to prevent and/or reduce these forms of pollution.

Residents in Île-de-France perceive noise generated by transport as the main source of noise pollution. However, rail traffic and buses account for less than 15% of noise pollution, far behind two-wheeled motor vehicles (35%), road vehicles (24%), horns/sirens (18%) and aircraft (10%).

About 400 complaints are received each year concerning rail traffic (RER, metro, and tram), road traffic (buses), equipment (escalators, fans, and sound systems), or work sites. Each year, RATP invests around €3.5 million in operations aiming to reduce noise and vibration at the source. The Group pursues an ongoing dialogue on these issues with all its stakeholders, in particular with local residents, local elected representatives, and associations.

RATP is going further still by quantifying extra-auditory health impacts (sleep disorders), drawing on the assessment method proposed by the Agence nationale de sécurité sanitaire (Anses – French health safety agency) for infrastructure projects with regard to the recommended thresholds of 54 dB(A) during the day and 44 dB(A) at night. The differential between these guide values and the applicable regulatory standards being substantial, a gradual anticipation of the acoustic design choices must be undertaken for each project.

Aims

More than 50% reduction in noise black spots between 2010 and 2019 (goal: 0 in 2020) RATP is committed to responding to 100% of complaints from residents in the Île-de-France region within 21 days

Our commitments, policies, and actions

Removing noise black spots in the Île-de-France region

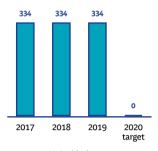
The company is currently focusing its action on achieving its goal of having zero noise black spot in the Île-de-France region by 2020.

A noise black spot is a sensitive building located in a critical noise zone whose façade noise levels are higher than the limit values set by regulations. In 2019, exceeded permissible limit values affected 334 people.

Since 2010, the noise reduction programme in the Île-de-France region has reduced the number of people exposed to the maximum threshold of European directive 2002/49/CE by over 50%. At the end of 2019, a financing agreement for noise barriers and façade treatment was signed between the region, the Val-de-Marne departmental council, RATP, and the Métropole du Grand Paris (Greater Paris metropolitan area) to reduce the last noise black spots linked with RER line A in the Vincennes and Fontenay-sous-Bois municipalities.

> Key indicator

Number of people exposed to the maximum threshold of EU directive 2002/49/EC — RATP



Noise black spots

Organisation of studies on acoustical and vibrational impact and concept designs for all urban projects

The second key objective of the policy is the "non-generation of noise black spots" in all projects creating and significantly upgrading land transport infrastructures, in order to bring their noise impact under a standard regulatory framework. It is imperative, given the operating characteristics of the long-standing network, to conduct an acoustic study as soon as one of the criteria changes (change or upgrade of rolling stock, change to the service, operating periods, speed, fitting out infrastructure, etc.). This study allows to identify future risks, foresee action plans, and begin coordinating the necessary impact studies. All stakeholders (transport authority, infrastructure manager, operators and rolling stock manufacturers) must be informed.

Upgrading existing rolling stock

Rolling stock performance is a key area of action to improve the comfort of passengers, employees and local residents. RATP and its stakeholders (transport authority, manufacturers, equipment manufacturers, etc.) contribute to strengthening noise and vibration requirements for all new investments and for all maintenance, upgrading, renewal, and commissioning new stock.

Residents living near line T7 have asked the company to reduce the squealing noise produced on bends for several years. In 2018 RATP decided to introduce new trains fitted with a system that uses an adhesion modifier when entering bends to reduce the squealing noise (2 trains for line T7 and 3 trains for line T8). Significant adaptation works had to be carried out on the trains, and it was necessary to optimise the maintenance conditions and raise awareness among drivers. Three additional trains will be fitted out in 2020 (2 on T7 and 1 on T8).

> Key indicator

Percentage of rolling stock with a low noise level (buses, trains)	2017	2018	2019
RATP	_	54%	53%

Preventing noise pollution

RATP contributes to preparing environmental noise prevention plans for the State, municipalities, and public inter-municipal cooperation bodies in question. These plans stem from European directive no. 2002/49/EC of 25 June 2002 on the assessment and management of environmental noise. It aims to prevent and reduce excessive noise through action plans, protect quiet areas, and ensure public information and involvement.

In that respect, every five years since 2007, the company has provided department prefects with strategic noise maps for rail infrastructures, public transport on dedicated lanes, and facilities classified for environmental protection, as well as with the rankings of its infrastructures. This information is used as a basis for developing these environmental noise protection plans.

As the prime contractor for major public transport projects, including extending long-standing Paris metro lines, RATP complies with strict rules for assessing and managing noise pollution, in cooperation with local authorities. As part of its projects, it first assesses the noise and vibration impacts, defines preventive solutions and implements a noise pollution and vibration management plan.

RATP is also a local contact for passengers and residents living alongside its network.

RATP is committed to responding to 100% of complaints from residents in the Île-de-France region within twenty-one days. In this context, the company takes steps ranging from an in-depth diagnosis of infrastructures to noise and vibration measurements in the complainant's home.

> Key indicator

Number of complaints and claims	2017	2018	2019
RATP	473	489	566
RATP/RATP Real Estate	499	578	673

The increase in complaints and claims in 2019 was mainly observed in the Bus department (+62). This can be explained in particular by the implementation of a more robust quality and census system making data more reliable and more precise.

Bringing the exposure to electromagnetic waves under control

Amidst the ongoing roll-out of 3G/4G in the Île-de-France network, RATP intends to meet passengers' high expectations with a view to protecting public health and complying with regulations.

Our commitments, policies, and actions

Ensuring compliance with regulatory thresholds

RATP set up a commission over fifteen years ago to monitor health, regulatory, and technical issues, in order to ensure compliance with the applicable law. Since 2004, regular monitoring measurements have been carried out underground and on the surface by Cofracaccredited organisations. RATP also implements recommendations set forth by Anses.

> Key indicator

Number of electromagnetic field measurements carried out during			
the year	2017	2018	2019
RATP	900	748	268

The decrease in the number of measures between 2018 and 2019 can be explained by a slow-down in activity linked to decree no. 2016-1074 on the protection of workers from hazards arising from electromagnetic fields (EMF). As the majority of risk analyses were performed between 2013 and 2018, the EMF commission focused on the roll-out of 3G/4G in 2019.

Rules have also been defined with telecommunications operators to minimise passenger and employee exposure in each station and tunnel. To ensure compliance with current standards, RATP works in close collaboration with Agence nationale des fréquences (ANFR – French Frequency agency), which manages all radio frequencies in France on behalf of the State. All the levels measured comply with regulations for the general public (decree no. 2002-775 of 3 May 2002) and RATP staff.

Protecting and informing

In 2016, to ensure that electromagnetic radiation was kept under control, RATP's EMF commission mapped emissions in accordance with decree no. 2016-1074 of 3 August 2016 on the protection of workers from the risks arising from EMF.

RATP is committed to protecting and informing anyone who may be exposed to them, passengers and employees included. The Group provides information about responsible behaviour to limit their exposure on its website.

Guideline 1.3 — Encourage urban integration and functional diversity

In a context of intensive urban development, ever-denser cities and ever-scarcer available spaces, the Group is contributing to the creation of resilient and sustainable cities. RATP has joined forces with the City of Paris to develop mixed urban programmes combining industrial sites, housing, public facilities, and green spaces. As part of the "Logement pour tous" (Housing for all) pact signed with the City of Paris and several players in the housing sector in 2014, the Group has committed itself to two aims:

Build **2,000** housing units by 2024, including 50% social housing

Add 4 hectares of greenery to rooftops and walls by 2020, with one third dedicated to urban agriculture

Restructuring industrial sites to promote urban diversity

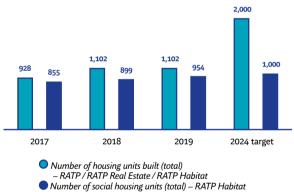
To promote urban diversity, RATP has undertaken restructuring operations at its industrial sites. Garages and maintenance workshops have been redesigned to include bold architectural complexes as well as social and private housing, offices, and public spaces promoting social cohesion, such as nurseries, secondary schools, and cultural centres. Creating these places is a means to fight against urban sprawl and promote social diversity.

Eight site development projects have been launched with the aim of creating 2,000 new housing units in Paris by 2024.

The Vaugirard project involves redeveloping the maintenance workshops for line 12 while allowing them to continue their activities. The workshops will combine housing (including social housing), local shops, green spaces, and public and cultural facilities. The innovative proposals devised by RATP include installing a green roof, the urban agricultural production of which will be sold directly on site through a fresh produce market located on the ground floor of the complex. This project was introduced during RATP's second issuance of green bonds in 2019.

> Key indicator

Number of housing units built



understanding to create 2,000 housing units in Paris by 2024. This agreement, which, as part of the restructuring of RATP's industrial sites, will allow for a more compact use of sites and the promotion of functional diversity by combining housing and the sustainability of

In 2014, RATP and the City of Paris signed a memorandum of

industrial employment and infrastructure improvement. RATP Group is contributing to the emergence of a more compact, more efficient city that fights urban sprawl and longer home-to-work commutes. All of these projects are developed as part of an eco-design approach to control energy consumption and to reduce the carbon footprint of the city of tomorrow. In order to advise the departments in charge of these large projects modifying classified facilities, RATP and the Paris police prefecture have set up a procedure clarifying the number and the format of information meetings necessary for the proper appraisal of projects.

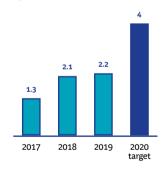
Committing to the smart and sustainable use of buildings

As part of its commitment to biodiversity protection, RATP has launched a systematic analysis of its real estate properties in the Îlede-France region to examine the possibility of planting greenery and including urban agriculture alongside existing green spaces.

As part of this approach, RATP Real Estate signed a five-year partnership agreement with AgroParisTech in 2017 including research initiatives regarding planting greenery and urban agriculture (impact on pollution, air pollution control via a green ecosystem, building cooling, and rainwater harvesting). This partnership is part of RATP Real Estate's sustainable development policy, based on sustainable buildings: a strategy is implemented for each real estate project to meet the environmental and social challenges of future sustainable buildings.

> Key indicator

Number of hectares planted - RATP / RATP Real Estate



In 2019, RATP planted 2.2 hectares of greenery, including 1,585 m² for urban agriculture.

CSR policy strategic focus 2: Reduce our environmental footprint

As it is located in cities, the Group does everything in its power to limit its environmental footprint and to contribute to the ecological transition. It explores new solutions for saving energy, conserving resources, supporting the circular economy, and combating climate change. This commitment is part of the Group's CSR policy. The existing policies allow us to respond to the main risks identified:

- energy and climate change,
- change in environmental regulation.

Guideline 2.1 — Reduce our carbon footprint and saving our resources

Taking action on climate change and the energy transition

The transport sector is the second largest global source of greenhouse gas (GHG) emissions caused by energy combustion, after power generation. Through its activities, RATP Group contributes to the sector's overall effort to reduce energy consumption and $\rm CO_2$ emissions. Far from being satisfied with this, it is pursuing a continuous improvement process for its energy and carbon performance. RATP has the ambitious aim to reduce its energy consumption by 20% and its GHG emissions by 50% between 2015 and 2025.

Aims (RATP)

50% fewer GHG emissions per passenger.kilometre by 2025 (2015 basis)

20% less energy consumption per passenger.kilometre by 2025 (2015 basis) 100% of metros fitted with electric regenerative braking by 2032

1st network in the world 100% fitted with LEDs in its stations

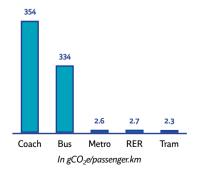
1st multimodal network in the world to be **ISO 50001** certified for all its activities

27% hybrid, electric, or bio-NGV-powered buses in the Île-de-France region fleet in 2019

Around **2,000** bicycle parking spaces managed near metro and tram stations

Encouraging shared low-carbon mobility

Average greenhouse gas emissions per passenger-kilometre, RATP network in Île-de-France



To encourage passengers to use less carbon-intensive transport modes than private cars and thus reduce their carbon footprint, RATP Group is improving public transport's attractiveness and its links with other transport modes, notably by providing mobility services in addition to its long-standing network: carpooling, car sharing, electric scooters, and autonomous shuttles. Among the additional services offered are approximately 2,000 bicycle parking spaces near metro and tram stations.

The ambitious Bus2025 plan

As a pioneer in energy and climate issues, RATP contributes to the energy transition and to improving outdoor air quality with the Bus2025 plan, which aims to provide a 100% clean bus fleet. It is the first transport operator of this size to implement such an ambitious action plan.

In the long term, approximately half of the bus fleet will be electric and the other half powered by renewable gas. Bus GHG emissions represent around 72% of RATP's energy consumption-related GHG emissions. The Bus2025 plan, which is part of the Île-de-France urban travel plan, thus allows action to be taken on a significant portion of RATP's carbon footprint.

RATP is committed to a major adaptation project for its bus depots to accommodate electric and renewable gas-powered buses. The first three sites have started operating and five others are already undergoing works.

RATP Dev's sightseeing bus subsidiaries, Open Tour Paris and The Original Tour in London, have started converting their fleets by launching the first 100% electric hop-on hop-off double-decker buses. In October 2019, Open Tour Paris inaugurated the first six NGV-powered vehicles, a world first. One third of the Open Tour Paris fleet has been converted to clean energies with six electric and six NGV-powered buses.

In France, in 2019, RATP Dev inaugurated three electric buses for SQYBUS, the Saint-Quentin-en-Yvelines urban network, a first electric coach for Dupas Lebeda, a subsidiary handling trips in the Hauts-de-France region, and the first NGV-powered coach for Rémi 36's line, between Châteauroux and Bourges, in the Centre Val de Loire region, operated by the STI Centre subsidiary.

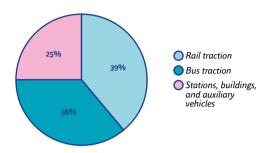
Orléans Métropole selected the RATP Real Estate and Systra consortium to convert 100% of its bus fleet to electric power by 2024.

An energy performance plan

Public transport modes consume relatively little energy per passenger transported. A passenger journey by metro or the RER network requires eight to ten times less energy than the same journey by private car and two times less by bus. However, RATP is committed to a performance-based approach to further improve these transport networks' efficiency.

RATP's energy efficiency policy was implemented from 2017 with all its activities ISO 50001 certified. To achieve its aim of reducing energy consumption by 20% by 2025, RATP is implementing an action plan based on four levers: rolling stock, buildings, infrastructure, and stations.

Distribution of energy consumption by use - RATP



The Group encourages eco-driving practices, in particular among bus drivers, from the initial training stage as well as during on-going training.

On rail networks, the recovery of braking energy is a major lever for reducing energy consumption: new rolling stock is systematically fitted with a device regenerating energy when braking. All trams and RER trains in the RATP network are fitted in this manner. From 2032 onwards, all metros are also expected to be able to regenerate energy when braking.

In 2019, Île-de-France Mobilités and RATP placed a record-breaking order with the Alstom-Bombardier consortium to continue the unprecedented upgrading of all Île-de-France public transport initiated in 2016. Up to 410 MF19 trains may be ordered to improve comfort and reliability thanks to these next-generation trains. An initial firm order for 44 trains has been placed.

To reduce its energy consumption on buildings, the Group is implementing energy-saving measures and systematically examines the possibility of using renewable and recovered energies.

In 2019, RATP Group got its first E+ C- certification (positive energy and carbon reduction building) for the construction of the future headquarters of its social housing subsidiary, RATP Habitat. This certification meets the Group's ambitions in terms of eco-design and reducing the carbon footprint on its tertiary sites.

In 2019, nine RATP Group sites participated in the fourth edition of the CUBE 2020 competition for efficient building use, organised by the Institut français pour la performance énergétique des bâtiments (French Institute for the energy performance of buildings), with significant savings: 6.6 GWh of energy saved and 1,500 tonnes of CO₂e avoided. RATP Group came second in this national challenge to save energy.

Adapting to climate change

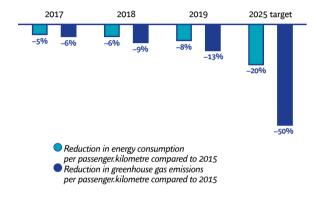
All RATP's activities are affected by climate change: operation and maintenance of transport systems (passenger transport, stations, information and communication systems), procurement of bus and train rolling stock, management of rail infrastructure, and design of new infrastructures (buildings or rail infrastructures). The major climatic risk concerns the flooding of underground networks.

In the early 2000s, RATP adopted a flood risk protection plan, which aims to preserve facilities (rolling stock and infrastructures) and encourage swift operational recovery after floods. This plan is subject to a continuous improvement process, particularly to take into account feedback provided following the flooding of the Seine and Marne rivers. In 2019, the relevant State departments recognised the update to the flood protection plan carried out by RATP in 2018.

In addition, in 2019 RATP started to structure and formalise a widerreaching prevention plan to limit the impact of climate change on the availability of rail infrastructures.

> Kev indicator

Trends in energy consumption and GHG emissions - RATP



Taking action to bring environmental risks under control

With its bus depots and workshops located in the city centre, RATP is one of the few companies to operate on a large scale in urban and suburban areas. Therefore, the prevention of all forms of pollution and control of environmental risks is a priority. In addition to complying with regulatory obligations, RATP has adopted an ambitious certification plan.

RATP Dev has rolled out an environmental guide for its French subsidiaries. Its goal is to give the managers of French sites consistent and summarised information about environmental issues, and particularly the regulatory requirements applicable to their sites and activities. The Environment Guide comes with a self-diagnosis checklist. Intended for subsidiaries, this checklist allows them to easily carry out a self-diagnosis in situ.

In 2019, the multi-year certification plan allowed two subsidiaries/ operational units to become ISO 14001 certified (Autolinee in Tuscany and the Doha metro) and three to become ISO 9001 certified (Algiers tram and metro, Doha metro).

Aims

100% of RATP's industrial sites to be ISO 14001 certified by 2020

ln 2019

96% of RATP's industrial sites were ISO 14001 certified

ICPE formal notice

Our commitments, policies, and actions

Ensuring compliance at the most at-risk sites

RATP Group operates installations classified for environmental protection Grounds (installations classées pour la protection de l'environnement – ICPE). These installations classified for environmental protection are listed according to the quantities and hazardousness of the substances used or stored, and the environmental risks inherent in the site's activities. As of the end of December 2019, RATP operated 174 ICPEs at 64 sites. Their mapping covers all activities specific to an urban mobility player: maintenance workshops, cleaning activities, gasoline or NGV refuelling stations in bus depots, battery charging (including electric vehicle charging), combustion installations such as boilers and power generators, etc. As in 2018, RATP facilities were not the subject of any formal notice in 2019.

RATP Dev's French subsidiaries are also subject to specific ICPE monitoring.

> Key indicator

Number of ICPE formal notices	2017	2018	2019	Target
RATP, RATP Dev	1	0	0	0

Preventing soil and water pollution

The Group has introduced a variety of measures to provide sustainable protection of the soil against all forms of pollution:

- before projects, it carries out diagnostics on the environmental condition in order to identify and describe any possible pollution present in soils and/or underground waters. If activity is discontinued, the same surveys are carried out in compliance with the regulations in force;
- during work scheduling, communication with local residents is carried out before the start of operations. Any disturbances (dust, road damage, noise, etc.) are analysed and preventive actions taken based on the results: installation of truck washing areas, dust spraying, etc.;
- in the operations phase, preventive and corrective measures are implemented as per ISO 14001 in compliance with regulatory requirements (retention tanks, pre-treatment of industrial waste water before it reaches municipal treatment plants, emergency situation procedures, etc.).

RATP Real Estate has drawn up a charter for a work site with low environmental impact. Its aim is to formalise tangible environmental commitments, based on six commitments – reduce noise pollution, reduce air pollution, limit soil and water pollution, limit visual pollution, reduce waste, and optimise resource consumption. Signatory partners and suppliers undertake to comply with it. The recycling of over 70% of work site waste is a major challenge for building in Île-de-France.

Guideline 2.2 — Develop the circular economy

To provide services while limiting raw material, water, and energy source consumption and waste, the Group is focusing on developing the circular economy.

Promoting regional and industrial ecology

RATP Group is enhancing its resources and promoting industrial and regional ecology.

Our commitments, policies, and actions

In 2019, RATP and the City of Paris continued their commitment to the "Quartier des Deux-Rives" (Two-banks district) project. As such, numerous operational actions were conducted throughout the year to encourage inter-company synergies and to contribute to decreasing the district's environmental impact.

In May 2019, some stakeholders in the district got involved with RATP for the "Paris se met au verre" challenge (Paris encourages using glass), which invited employees to challenge themselves to reduce their consumption of drinking water resources and use glass as an alternative to plastic. Through challenges and commitments, RATP Group came fourth in this action plan.

In July 2019, the Deux-Rives was heavily involved, with the impetus of RATP and the City of Paris, in the organisation of the *Tri en Seine* (Sorting on the Seine) event, the first river collection point for mixed waste intended for companies and individuals. The operation took place from 5 to 7 July and collected almost 15 tonnes of waste and contributed to reducing the environmental impact related to waste collection by encouraging a modal shift on the waterway. As part of this event, RATP also mustered its headquarters employees and contributed 4 tonnes on 5 July, which was a day dedicated to the district's companies.

Today, the Deux-Rives has a real identity and RATP got involved with other demonstrations and projects, particularly during the European Mobility Week, along with local economic players.

An annual meeting to bring people together and get them involved took place on 18 October at Maison de la RATP. It provided an opportunity to give information about the issues and aspects of this first French circular area in a dense urban environment.

Water, waste and food wastage

Optimising water management

Every year, RATP consumes nearly one million cubic metres of drinking water in carrying out its rolling stock maintenance and washing activities. Making better use of this resource is therefore a key challenge. The Group aims to reduce water consumption at the source by raising employee awareness through the inclusion of specific targets in environmental management systems. It also takes actions such as the recovery of infiltration water and the optimisation of rolling stock washing.

Recovering water

Runoff water, from rainwater ingress, from floods, or from water tables in underground works is now discharged at a rate of 10 million cubic metres per year through drains, Parisian canals, or in the Seine.

RATP is examining the possibility of reusing this water in a virtuous way. The water is partially returned to the natural environment (Seine, Saint-Martin canal and Saint-Denis canal) to avoid overloading treatment plants. Another part is reused by the company, for example, to water the grassed platform of the T3b tram.

Since July 2019, RATP and Eau de Paris (Paris water operator) are trialling a pilot project at the Balard pumping station on metro line 8, aiming to recycle runoff water and inject it into the City of Paris non-potable water network.

The aim is to reduce the consumption of drinking water and to use runoff water and non-potable water more generally as alternatives to potable water. This project also aims to diversify the supply of the non-potable water network to limit the pressure on current water resources. As such, it is part of a circular economy logic since it allows the water resource to be enhanced to a more than satisfactory quality for new uses, such as cleaning roads and service vehicles, or even watering parks and gardens.

Feedback is underway to verify in particular that the re-injection connection for runoff water does not disturb the hydraulic conditions of the non-potable water network.

As part of a partnership with Eau de Paris, the trial could then be rolled out across several of the 269 pumping stations in Paris so as to better preserve water resources in the Île-de-France region.

Optimising rolling stock washing water

To optimise rolling stock washing water consumption, RATP is setting up a system for recycling washing water (for buses and trams) and collecting rainwater at some industrial sites.

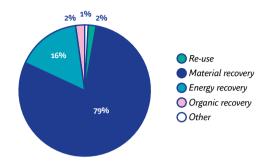
Responsible water management

Faced with the range of waste produced, in particular for maintenance activities, RATP pursues a policy that combines reduction at source and maximum waste recycling.

In 2019, RATP produced 26,727 tonnes of industrial and service sector waste (excluding maintenance ballast, which amounted to 8,510 tonnes in 2019), comprising 4,212 tonnes of hazardous waste and 22,154 tonnes of non-hazardous waste that was recovered.

99% of RATP waste is recovered every year using different methods (recycling, reuse, etc.). Only 1% is incinerated.

Waste recycling method



Combating food waste

The RATP works council participates towards the company's sustainable development approach by limiting the environmental impact of the catering activity for which it is responsible. Since 2018, RATP has been collecting and recovering bio-waste from the main company restaurants. The service is subcontracted to an Île-de-France region plant that subjects this bio-waste to anaerobic digestion. It ensures the energy from the biogas produced is recovered and the digestate organically distributed on agricultural land.

Guideline 2.3 — Promote continuous improvement and eco-design measures

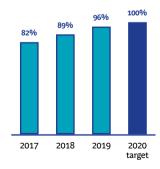
The Group is pursuing a certification plan for its activities: QSE (quality, safety, environment) certification for most of its industrial activities, ISO 50001 (energy management), and continuous improvement initiatives undertaken in accordance with the EFQM® (European foundation for quality management) methodology.

RATP has a contractual commitment with Île-de-France Mobilités to implement an environmental management system at all its industrial sites by 2020.

At the end of 2019, 96% of its industrial sites were ISO 14001 certified.

> Key indicator

Percentages of industrial sites ISO 14001 certified - RATP



Number of industrial sites ISO 14001 certified	2017	2018	2019
RATP	80	82	89
RATP, RATP Dev	81	83	91

Through its CSR policy, RATP Group is committed to promoting an eco-design and eco-specification approach to all its projects (infrastructure, building practices, rolling stock, and ISs), by encouraging the choice of products or systems that are less energy-consuming, have a longer service life, and are more economically efficient.

RATP has adopted a sustainable development integration standard for each step in the design of its projects. Ecological solutions are actively sought during the design phase. During the construction phase, the Group promotes eco-responsible construction that includes an eco-design approach and projects with a low environmental impact.

During the project's operation/maintenance phase, RATP gives priority to seasonal temperature adaptation, ecological material use, rainwater harvesting, and installing green rooftops.

In the Île-de-France region, garages and maintenance sites for new tram lines generate some of their power through photovoltaic panels, heat pumps connected to geothermal probes, and ground-coupled heat exchangers.

In 2019, a partnership signed between RATP Group and Woodeum aims to jointly develop eco-designed construction operations on five RATP sites in Paris and its inner suburbs, which present specific constraints to public transport infrastructures, without impacting their activities. These sites potentially represent 70,000 m², requiring special construction methods involving building with timber.

CSR policy strategic focus 3: Confirm our social responsability

For RATP Group, confirming our social responsibility means contributing to equal opportunities, promoting social dialogue in all contexts, taking action against social exclusion at all levels, and being a partner in collective interest projects. It also means protecting our customers' personal data and ensuring that our practices are exemplary regarding our employees, suppliers, partners and the regions in which the Group operates, in all our activities and environments.

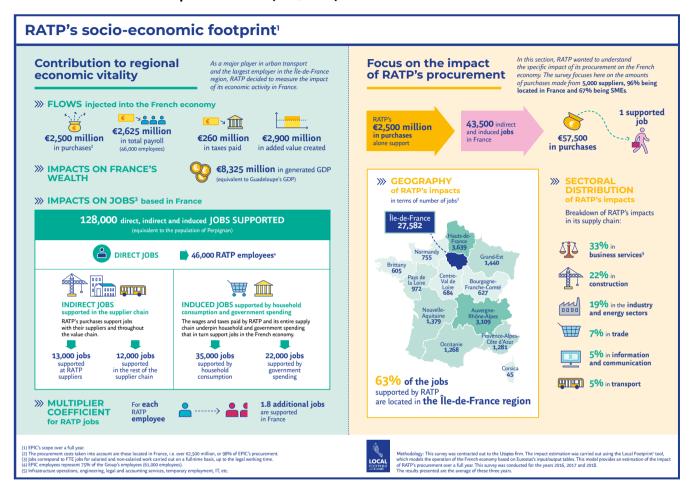
The existing policies outlined below allow us to address the main risks and issues identified:

- regional anchoring;
- taking CSR into account in purchasing;
- personal data management;
- compliance with business ethics;
- health and safety at work;
- · high-quality social dialogue;
- equal opportunities.

Guideline 3.1 — Contribute to economic vitality and solidarity in regions

In the face of population growth, urban migration and the resulting environmental, economic and societal challenges, transport players have a strategic role to play in improving the quality of life of residents and making cities more inclusive. Through its activities in France, RATP Group contributes to the economic and social development of the regions in which it operates and participates in implementing public policies in favour of employment and social inclusion.

RATP's socio-economic footprint in France (2015-2017)



Social inclusion and vocational integration

The Group's approach is based on four complementary approaches:

- 1. a human resources policy committed to diversity and equal opportunities, notably through:
- awareness-raising and training programmes for diversity and equal opportunities in all of the Group's subsidiaries;
- actions to increase the percentage of women in the workplace. In 2019, 21.5% of RATP's newly hired employees were women;
- actions in favour of the employment of people with disabilities, 110 people hired by RATP in 2019;
- a proactive policy for youth employment (773 work-study contracts were signed in 2019 by RATP);
- 2. the action of the RATP Group Foundation promotes social mobility through four programmes to provide access to culture, education, employment, and ecological transition;
- 3. a socially-responsible purchasing policy;
- 4. prevention actions through RATP's social outreach.

56% of RATP Dev's subsidiaries surveyed in 2018 have specific local initiatives or agreements to promote the hiring of the most vulnerable sections of the population.

RATP Dev and RATP Dev Casablanca are fully committed to the greater Casablanca area and to Morocco in general. Strong and sustainable partnerships have been established with Emines, the École centrale in Casablanca, and the EM Lyon Casablanca to propose study projects or programmes associated with innovative mobility.

Casaroc has also joined forces with the Réseau entreprendre Maroc to train young people to work in the field of digital technologies in order to help them improve their skills and create their own businesses.

Encouraging regional action

RATP Group contributes to regional economic and social development and ensures that regions benefit the greatest number of people:

- by creating jobs;
- by strengthening regional networks and encouraging social cohesion, notably through partnerships aiming to integrate vulnerable people.

RATP Group's regional development agencies act as intermediaries for implementing the company's policy to promote jobs and sustainable mobility. Their innovative action plans facilitate RATP Group's interaction with regional audiences and speed up partnerships.

Agencies are resource centres that roll out RATP's main social commitments adapted for regional users, along with local institutional and socio-economic players and through the signing of 91 partnership agreements.

In 2019, RATP pursued several regional action programmes to promote social and professional integration for regional populations through:

- participation in 68 employment forums, which enabled RATP to meet around 6.400 people:
- the organisation of 135 collective and public information meetings and 30 or so site visits to inform 3,000 people about RATP's jobs and careers and the Group's hiring procedures, in partnership with inclusion and employment stakeholders;
- 314 Ateliers mobilité® with 3,138 people trained through this mobility access programme;
- helping 172 people find jobs through gateway schemes (secure pathways), enabling them to prepare for recruitment tests for different jobs.

Ateliers mobilité® for sustainable mobility

Mobility determines access to employment, training, and the social sphere in general. For fifteen years, RATP has been offering Ateliers mobilité® that provide real training in urban mobility. The workshops are mainly intended for users enrolled in school or vocational integration courses. They are run by RATP employees or by civil society stakeholders (le Réseau, AGIRabcd, etc.) with whom the company has signed partnership agreements.

They help people who are not familiar with public transport networks to acquire the knowledge necessary to use them (planning routes, travel time, reading maps, good commuter behaviour, etc.) in connection with a partner organisation (public body, association).

An Ipsos survey (2016) revealed that 87% of participants would advise others to attend a Ateliers mobilité®, 60% would like to attend another Ateliers mobilité®, and 59% are less anxious about using public transport.

Purchasing, a factor for employing the most vulnerable groups

RATP is convinced that purchasing can contribute to public policies for people facing difficulties in finding a job.

Our commitments, policies, and actions

Solidarity purchasing

RATP is committed to increasing its purchasing from stakeholders involved in integration via economic activity and from players in supported and protected sectors (centre and service helping people with disabilities to find work/adapted companies). Through these purchases, RATP is meeting its service and supply needs, supporting the local economy, and contributing to the activity of organisations with a social integration mission for people facing difficulties in finding a job.

The services contracted out involve the laundering of maintenance clothing, maintaining green spaces, document printing, document destruction, waste management and recycling, cleaning of living areas on work sites, catering, etc.

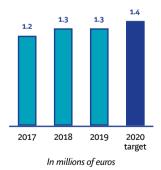
A dedicated "Osons les achats solidaires" (Let's opt for solidarity purchases) event was organised in March 2019, aiming to raise awareness among internal stakeholders and meet new suppliers. This event is part of RATP's plan to expand its solidarity purchases into new sectors. This event brought together 200 RATP buyers/ specifiers, 26 suppliers, and over 150 meetings in the form of speed dates were organised.

In 2019, the Group pursued its plan to diversify solidarity purchases, particularly through partnerships between the standard sector and stakeholders in the social and solidarity economy. For example: facility management, information technology, digitisation, logistics, mechanical components provision.

Over the past year, solidarity purchasing accounted for €1.312 million, including €394,000 for the inclusion sector and €919,000 for the supported and protected sector.

> Key indicator

Solidarity purchases amount - RATP



Our aim

Exceed €1.4 million per year by 2020

Contractual clauses in favour of inclusion

Since 2011, almost 2.6 million hours of inclusion work have been completed through purchases. 4,900 people have benefited from this programme, with 530,000 hours completed and 900 people in 2019.

These past few years, RATP has been committed to rolling out a quality management programme by targeting certain markets and activity sectors with regard to target audiences and regional issues. RATP relies on facilitators to implement integration clauses. The facilitators mobilise local key players in employment and support companies by proposing candidates and putting them in touch with structures for inclusion through economic activity.

The Grand Paris Express works are a real opportunity for vocational integration and access to employment in the Île-de-France region. Almost 700,000 hours of inclusion work are thus planned for the north and south extension of metro line 14, for which RATP has delegated project ownership responsibility (458,765 hours to date).

100% of current major works projects have an inclusion strategy.

> Key indicator

Number of inclusion hours completed			
(SIAE ⁽¹⁾ clauses and purchases)	2017	2018	2019
RATP	420,000	385,000	530,000

⁽¹⁾ SIAE (structures d'insertion par l'activité économique): organisations for inclusion via economic

Purchasing practices in favour of SMEs

RATP's involvement in regions can also be seen in its commitment to SMEs. RATP has continued its efforts to facilitate SMEs' access to its contracts. It is developing SME referencing using qualification systems and suppliers' panels. Particular attention is given to SMEs for rolling stock maintenance contracts (metro, RER, bus), through adapted sourcing and allocation. As part of its innovation strategy, RATP is undertaking several actions supporting innovative start-ups and SMEs to contribute to the emergence of new mobility solutions (autonomous vehicles, digital services).

SMEs represent 65% of RATP's suppliers and 19% of its purchases. with a high percentage of those located in Île-de-France.

Every two years, the Pact PME association establishes a barometer for RATP with regard to relations between customers and SME suppliers. In 2019, RATP obtained a 64% satisfaction rate among its SME suppliers with a questionnaire reviewed by the Pact PME.

Furthermore, the company is improving its internal processes in order to shorten the time required to pay suppliers.

Fighting against extreme exclusion

As a public company, RATP cannot ignore situations of extreme exclusion reflected in its stations. As a signatory to the Paris pact to combat extreme exclusion, it spends around €7 million a year helping homeless people on its network. The initiative combating extreme exclusion supports this commitment by reconciling business rationale and "human" rationale, and by focusing on the connection and relationship with the people being helped. Social compendium is an RATP dedicated structure, which was created in 1994 and is comprised of sixty or so voluntary, trained staff. Its main task is to be in daily contact with homeless people in its stations and to direct them. if they so wish, towards solidarity and inclusion facilities open during the day, or to emergency accommodation centres in the evenings and at night-time.

Through social compendium, in 2019 RATP implemented a new action plan to help homeless people locate a shelter in order to move out of the metro network. To meet the needs of homeless people on the network, RATP has signed a partnership with four associations managing day shelters: several shelters are set to open early in the morning, including Emmaüs Solidarité (for the Espace Bichat), the Mie de Pain (Arche d'avenirs), the Samu social de Paris (the Maison dans le jardin), and a yet to be identified Aurore association site. The company is also going to support partner patrols, which will intervene along with the social compendium staff, including a patrol dedicated to women, who are a vulnerable population representing 12% of homeless people in the metro.

> Key indicator

Rates of assistance provided to homeless people by directing them to social support services	2017	2018	2019
RATP	69%	73%	71%

This indicator reflects the number of people in need staying in RATP stations who are referred to day shelters or accommodation relative to the number of people found by the social outreach teams. These referrals are subject to the acceptance of the people in need.

A Foundation for regions

The RATP Group Foundation supports inclusive community service projects at the heart of the Group's regions. It promotes social mobility through its four "access to" programmes: culture, education, employment, and ecological transition. The Foundation pays particular attention to the issues regarding digital transformation and gender equality, which are considered, respectively, in 22% and 17% of the 64 projects supported in 2019.

Additionally, the Foundation offers its employees various solidarity commitment schemes.



9 collaborative projects

Supporting inclusive access to culture

The programme for access to culture (€167,827 in endowments, 11 agreements) supports "social" initiatives on the part of cultural institutions as well as local associations' cultural education actions. The "L'opéra, c'est vous" (You are the opera) project set up by the Bouffes du Nord theatre allows migrant students to create a multicultural project together. The Foundation is driving an innovative project that uses culture as a tool for social inclusion and vocational integration. Built jointly with regional players (Louvre-Lens Museum, a local mission in Denain, and RATP Group's subsidiary in Valenciennes), and supported by Le Rameau research laboratory, the Foundation offers young people in the "Garantie jeune" (Youth guarantee) scheme a ten-session course through which they explore the museum's works, as well as jobs and mobility. They acquire soft skills and expertise, build self-confidence, and design their CV using slow motion and digital technology.

Promoting social diversity in access to education

The programme facilitating access to education (€227,840 in endowments, 16 agreements) aims to promote inclusive achievement. The "Un étudiant, une bourse, un mentor" (One student, one scholarship, one mentor) – "Trajets d'avenir" (Routes of the future) programme contributes to social diversity in paths towards excellence; 73 students are supported by 65 Group mentors. The Article 1 association supports young people in refining their behavioural skills through its "Job ready" scheme. The Course en cours association steers students towards scientific and engineering sectors through work on an original project involving most disciplines. It also teaches them how to work as part of a team. The student groups have to design, build, and promote a rolling object.

Promoting employment opportunities for the long-term unemployed

The employment opportunities programme (€231,376 in endowments, 16 agreements) promotes vocational integration through a variety of projects. The Pass'sport pour l'emploi (Pass-sport for employment) association uses sport as a lever for socio-professional integration. By means of a training scheme combining sport and other disciplines, it prepares long-term unemployed young people for jobs experiencing manpower shortages, particularly security staff.

Encouraging eco-friendly practices

The programme facilitating access to ecological transition (€125,600 in endowments, 12 agreements), launched in 2018, encourages ecofriendly behaviour. The Foundation supports tangible and awareness-raising initiatives: water conservation, reusing, recycling, and fighting against food waste. The Bretagne vivante association focuses on getting young people involved in ecological transition in order to create broader awareness. The association organises a film competition for young people. The films are widely broadcast and may be used for educational purposes. The Fourmis vertes association rolls out actions to raise awareness about waste management or to teach people to make sustainable cleaning products themselves.

Fostering employees' volunteering commitment

The Foundation supports volunteering projects in which the Group's employees are personally involved (€73,150 in endowments, nine agreements).

This includes various actions such as raising awareness about the presence of guide dogs in public spaces, a musical project for people with cognitive disorders such as autism, creating an educational farm for permaculture, a centre for young offenders as part of a restorative justice activity (helping them avoid being sent to closed facilities) in a bus repair workshop so that they can discover useful activities and jobs to encourage their social integration.

Fostering employees' solidarity commitment

In November 2019, the Group and its Foundation implemented payroll solidarity rounding, which allows employees to voluntarily make a donation to one of the four associations chosen by the Foundation. This can be done in the form of a monthly direct debit on their net salary to be paid, rounded down to the nearest euro. In addition, the employee can make a micro-donation to the same association for a fixed amount between €1 and €10 per month.

Number of direct and indirect recipients of Foundation's projects	2017	2018	2019
RATP Group	40,088	44,383	80,885

The significant increase in the number of recipients in 2019 compared to 2018 can be explained by new projects, whose digital component allows for a very large audience to be reached. Moreover, a project previously supported in 2018 was scaled up following the merger of the two associations. Finally, two cultural projects reaching a very large audience were also supported.

Guideline 3.2 — Promote management that encourages staff commitment

In addition to the information presented in this section, all social data is included in RATP's social balance sheet published on its website. Supported by the women and men of its workforce, RATP fosters the Group's performance and development by providing a more stimulating working environment and encouraging job satisfaction for all employees, while ensuring the skills required for its development.

Employee commitment also depends on management. RATP supports its managers to encourage collective intelligence within teams.

Optimise skills management

Continuous vocational training is essential to ensure the renewal of skills, increase employee professionalism, include technological breakthroughs and ensure that everyone can develop throughout their professional career.

2018 was marked by the setting of the new three-year guidelines for vocational training in 2018-2020 and the signing of the new agreement on continuing vocational training in 2018-2022.

RATP Group University offers cross-functional training and development programmes for skills, categories, and professions. It also hosts a sustainable urban mobility apprentice training centre for the inclusion of young people. Personalising every employee's training path is also one of RATP's key challenges. The aim is to empower each employee regarding their training choices while providing support and guidance from the HR department. This innovative view of skills management is ensured in particular through digital learning, which is set to be implemented by 2022, as well as through the implementation of a digital tool that will enable each employee to fill in their dedicated digital space and be an actor in their own career path.

The management of career paths is also changing. RATP systematically holds job interviews (with a completion rate of 93%) to identify employees' mobility wishes and their training needs.

3 out of 4 RATP employees are trained each year

784 work-study contracts are set up (RATP and RATP Real Estate)

6.22% of the total payroll is dedicated to employee training

RATP's performance is based in particular on its ability to maintain and develop its talent pool in France and abroad. New technologies contribute to the emergence of new competition, new jobs and thus new skills. In this context, attracting and retaining talent is essential for the Group to remain competitive.

To enhance its attractiveness, the Group launched its ambassador programme for students on social networks and in target schools. Ambassadors are employees who are active on social networks (Facebook, Instagram, and LinkedIn) and thus contribute to providing a better understanding of the Group and its businesses.

RATP also participates in many forums, such as the Challenge du monde des grandes écoles (prestigious graduate schools challenge), and develops targeted partnerships.

As proof of the programme's effectiveness, 47% of engineers recruited are under 30 years of age and are graduates of our target schools.

One of the main recruiters in the Île-de-France region:

4,538 employees in the Île-de-France region were hired by RATP in 2019

7,279 employees were hired by RATP, RATP Real Estate, and RATP Dev

Making diversity a success factor

RATP is aware that diversity is a performance factor. For this reason, diversity is one of the cornerstones of RATP's human resources policy. The diversity of classification systems within RATP Group improves the organisations' decision-making processes and creativity. Diversity bears witness to the company's openness in the regions where it operates.

Launched in 2017, the "RATP au féminin" (RATP women) programme is one of the collective commitment drivers aiming to increase diversity within RATP Group's organisations.

It is intended for all Group employees and is a source of suggestions to contribute to the emergence of new management and organisation models, and to guarantee a respectful working environment for everyone. Promoting diversity remains its main objective.

Ensuring equal opportunities in the workplace and wage equality between women and men

Equal treatment between women and men is a core element in RATP's human resources policy.

The fifth agreement on equal opportunities in the workplace and wage equality between women and men, signed in 2019, includes the following major commitments:

- to increase the ratio of female employees in the company;
- to closely analyse gender pay gaps in order to identify and reduce unjustified gaps;
- to change mentalities and combat stereotypes;
- to help reconcile employees' professional and private lives;
- to encourage shared parenting.

The agreement's main focus continues to be to increase the percentage of women in certain jobs (driving, safety) and the percentage of women on management committees.

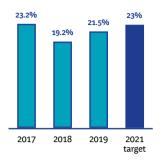
RATP Dev Middle East joined the group of signatories of the Women's Empowerment Principles as part of the UN GC, with the support of the French embassy and the French business community in the United Arab Emirates. This action plan bolsters the company's desire to make gender equality, empowering women, and particularly the seven principles for empowering women a true priority.

> Key indicators

The percentage of women working at RATP has grown slightly, reaching 21% in $2019^{(1)}$.

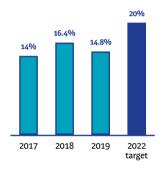
RATP Dev shows a decrease, going from 16.4% in 2018 to 14.8% in 2019. In addition, the percentage of women in RATP Dev's senior management is growing slightly (30.1% in 2018 to 30.9% in 2019). The percentage of women at RATP Real Estate is 47%, growing slightly compared to 2018. All the results are included in the table of indicators at the end of the non-financial performance declaration.

Percentage of women recruited by RATP

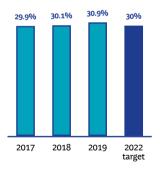


In 2019, the percentage of women recruited in RATP grew compared to 2018.

Percentage of women in the total workforce - RATP Dev



Percentage of women in senior management - RATP Dev



Employment and inclusion of people with disabilities

RATP is committed to pursuing the implementation of inclusion and reintegration measures that enable people with disabilities to find or keep a job. The company also develops action plans to raise awareness in the professional environment on the subject of disabilities at work, in order to facilitate the integration of people with disabilities.

Promoting aligned, local social dialogue

Social dialogue is a key factor in the Group's identity and has boosted its performance.

Our commitments, policies, and actions

Preventing social conflicts

Social dialogue is based on the agreement regarding trade union rights and high-quality social dialogue that took place in 2018, aiming to promote constructive social dialogue by focusing on collective bargaining. The social alarm system continues to play its role: in 2019, only 6% of the alarms reported resulted in a strike notice. However, the conflict rate is on the rise, in the context of government social reforms, with an average of 4.42 days of strikes per year per employee (strikes in December 2019).

In 2019, the 15 social and economic committees (SEC) created in 2018 were set up and met to discuss the economic and social issues at all levels of RATP. They replaced the employee representative bodies, employee delegates, works council, and health, safety, and working conditions committee.

Aligning social dialogue within the Group

After establishing an RATP France Group committee in 2012, an RATP European works council was created in 2017. As a forum for information, exchanging views, and consultation on the Group's situation and strategy, it encourages social dialogue at European level. A new mandate was implemented in 2019.

Anticipating opening up to competition

RATP undertook several action plans in 2018 to prepare for opening up to competition. It held a round of seven work meetings with the representative labour organisations to discuss the issues RATP Group is set to face as it opens up to competition.

17 work days called "Transformation Days" were also organised to discuss the new competitive landscape. 4,000 of the company's managers participated in this event.

Lastly, RATP and the representative labour organisations took part in government-led consultation meetings on the social provisions of opening RATP's bus activities up to competition, which will feature in a draft framework law on mobility.

19 collective agreements signed during the year

> Key indicator

Conflict rate ⁽¹⁾	2017	2018	2019
RATP	0.5	0.56	4.42

(1) Average number of strike days per employee per year.

The rise in the conflict rate in 2019 was due to the industrial action which took place at the end of the year and was related to the pension schemes reform. As of the end of November 2019, the conflict rate was 0.7.

Preventing occupational risks and promoting the health of RATP employees

RATP Group is committed to preventing occupational accidents and improving health and safety at work, beyond regulatory compliance, through the Group's occupational health and safety (OHS) policy.

The multi-year, cross-functional OHS action plan programme continued in 2019 to include the prevention of occupational risks in industry practices and to promote a professional qualification and learning organisation for all employees. This programme is prioritised with regard to the Group's significant occupational risks.

Our commitments, policies, and actions

Acculturation of managers to the prevention of occupational risks

As part of the managerial excellence programme, the prevention of occupational risks has been included in the new managerial standard.

To support the implementation of this standard, an events programme called "Management Club" has been set up: a club has been dedicated to OHS in order to enlighten managers regarding performance issues when it comes to preventing occupational risks and concerning the existing mechanisms to implement in their everyday managerial work (visual management, briefing/debriefing, managerial visits).

A participatory challenge was carried out for all employees in order to share and bring the work collective together around best practices and good reflexes for everyday activities to prevent occupational risks.

Re-engineering tools, norms, and training for more agile prevention

Rolling out digital technology allows the company to re-examine the practices and tools available to managers, health and safety staff, and employees in order to facilitate access to the knowledge, skills, and actions required for occupational risk prevention, thus making it easier to include prevention in the core of industry practices.

> Key indicators

	2017	2018	2019	2020 target (compared to 2015)
Occupational accident freque	ency rate	!		-
RATP	32	31.36	30.12	/2
Occupational accident sever	ity			
RATP	2.63	2.88	2.84	/2
Number of employees who a to perform their jobs and are		_		
RATP	286	284	265	/2
Percentage of operational ur or OHSAS 18001 certified	nits ISO 4	5001		
RATP	50%	55%	60%	100%

The frequency rate at RATP has fallen sharply by 25% over the past four years, from 40 in 2015 to 30 in 2019. The severity rate is also showing a positive trend with the start of a slight decrease compared to 2018. The main causes of occupational accidents reported are assaults and falls onto the same level, for which prevention and reduction action plans are initiated and taken to the highest level in the company.

Safeguarding employees abroad

RATP Group's priority is to ensure all employees a high level of safety/ security during business trips and stays abroad. Under the aegis of the Risk Management department, the international security mission conducts a health and safety risk prevention policy in cooperation with the Ministry of Europe and Foreign Affairs, the Centre inter-entreprises de l'expatriation CINDEX (Inter-enterprise expatriation centre), RATP's medical advisors, insurers, and specialised service providers. Procedures and tools (monthly mapping of country risks, safety guide, e-learning training according to risk levels, smartphone app, health and safety hotline, geolocation based on criteria chosen by the employee, etc.) are implemented so that all employees can prepare their journeys and stays under the best possible conditions.

Due to the subsidiary's international presence, RATP Dev's employees are exposed to specific risks depending on the country where they are working. Employee safety is crucial, whether it be for travelling employees, expatriate staff, or local employees.



In line with the Group's safety approach, RATP Dev has established a safety charter for its employees' trips, and procedures and processes to provide better employee safety management, depending on the countries visited and the risks involved.

This approach has led to a privileged partnership with International SOS

Guideline 3.3 — Ensure fair practices in our value chain

RATP Group considers it essential that all its employees behave in accordance with common values.

Ethics underpin our actions and our behaviour regarding the service provided to our customers. They are also a prerequisite for the company's performance.

Our commitments, policies, and actions

• Revision and communication of the company's code of ethics: a code of ethics was implemented in 2011. To meet the requirements of the Sapin II law, the code of ethics has been revised and shared since January 2019, together with an adoption plan. As part of this plan, the General Delegation for Ethics met all tier 1 department and subsidiary management committees, as well as about 40 units, in order to present this document.

The adoption phase will continue in 2020.

- Establishing a new whistle-blowing line: he whistle-blowing line set up in 2011 has been updated to meet the requirements of the Sapin II law, in particular with regard to data processing security and whistle-blower protection. The line is available to the entire Group, with a specific device for RATP Dev employees given the variety of countries and languages involved. At the end of the year, an assessment will be made and modifications may be implemented.
- The e-learning component "Ethics in question" is obligatory for RATP managers and supervisors. The redesigning of the awareness-building and training tools for ethics, compliance, CSR, and personal data protection is under consideration and is set to go ahead in 2020 using new tools.

Tax non-compliance

RATP Group has always been committed to carrying out its business in the strictest observance of business ethics. RATP Group's Code of ethics is in line with the commitments made by RATP, which joined the UN GC in 2003 and has thus undertaken to comply with the 10 founding principles on human rights, working conditions, the environment and eliminating corruption. For this reason, RATP Group makes tax transparency and eliminating tax non-compliance a management principle. RATP's ambition is to conduct its business in France and abroad in compliance with national laws and the OECD transfer pricing guidelines for multinational corporations and tax authorities.

In accordance with its legal obligations, RATP Group has submitted its tax return on a country by country basis stating the distribution of its profits, taxes and activities, by tax jurisdiction.

A compliance programme for increased vigilance regarding business conduct

In a changing competitive and legislative environment, RATP Group is committed to a transparency approach based on compliance with the highest French and international standards in business conduct. To this end and following the Sapin II law, the Group has created a compliance unit to meet the global compliance challenges. The Group is responsible for establishing and implementing compliance programmes that cover topics such as eliminating corruption, anti-competitive practices, and interest representation.

To establish the anti-corruption programme, the Group based itself on the eight pillars of the Sapin II law together with the French Anti-Corruption Agency's recommendations and supervision questionnaire. With this in mind, the Group continued to roll out its corruption prevention system in 2019.

Numerous compliance actions were finalised or are on the way, including, notably:

- the distribution of the code of business conduct to all Group employees;
- the updating of internal regulations for EPIC and subsidiary departments, including the anti-corruption rules to be observed and the code of business conduct;

- the establishment of the compliance network in all departments and subsidiaries:
- the roll-out of training for concerned staff members with 50% of employees trained as of the end of 2019, training the Group's management bodies, training staff in charge of lobbying and interest representation activities;
- the ongoing roll-out of accounting control procedures;
- the sharing of the internal reporting procedure with all Group employees.

Some of the programme's pillars that are more challenging to implement will be rolled out in 2020. These include the following:

- strengthening the bookkeeping procedures that present risks;
- the internal auditing and assessment system for the anti-corruption programme.

> Key indicator

Percentage of staff members concerned and trained as of the end of December 2019: **50%**

Personal data management

The GDPR, which came into force on 25 May 2018, reinforces the personal data protection principles set forth in the French data protection act. A network of data protection correspondents working in departments and subsidiaries (RATP, RATP Habitat, RATP Real Estate, RATP Connect, and RATP Travel Retail), as well as facilitators through the business areas involved (HR, purchasing, IT) are managed by the DPO. The network provides a contact point with the Group's supervisory authorities, employees, and outside stakeholders. Its main role is to advise employees to ensure compliance with the GDPR. An action plan has been implemented for all departments and subsidiaries with a compliance dashboard, monitored by executive management and the Excom expert involved.

RATP Dev and its subsidiaries, as well as RATP Smart Systems and its subsidiaries, each have their own DPO.

> Key indicator

Number of notifications sent to CNIL (French Data Protection Authority) in the event of personal data breaches	2017	2018	2019
RATP, RATP Real Estate, RATP Habitat, RATP Travel Retail, RATP Connect	_	0	1

Risks and vigilance in the supply chain

5,848 RATP suppliers **96%** of suppliers in France

In 2012, RATP committed to a responsible purchasing policy in order to incorporate sustainable development throughout the purchasing process, which goes from the purchasing strategy to the fulfilment of the contract. Purchasers ensure that they define purchasing strategies in line with the Group's policy and values with the support of specifiers, in order to prevent and control social and environmental risks. Suppliers' offers are selected based on quality, cost, and deadlines, as well as CSR. A dedicated organisation and a training and awareness-raising plan support purchasers and specifiers during the process.

In 2019, 25% of purchasing documents included CSR requirements, articles, and criteria.

Our commitments, policies, and actions

A proactive approach to comply with due diligence requirements

In 2019, RATP conducted risk mapping with regard to the infringement of human rights, fundamental freedoms, health and safety, and the environment, along their supply chain. A CSR risk level was linked to each of the purchasing categories.

The goal for 2020 is to create a sensible and effective vigilance plan relying on the best practices already in place and implementing appropriate actions. These actions depend on the level of CSR risk observed and strategic issues.

Supplier audits, a targeted approach that has been in place for several years

When risks are identified in the supply chain or for strategic purchases such as rolling stock, RATP initiates social and/or environmental audits to check the production conditions at its suppliers' sites. They are conducted before the contract is awarded. The bid may be rejected in the event of major non-compliance.

100% of the fleet's electric buses have been audited by an independent agency

100% of the critical parts manufacturers for railway rolling stock have been audited

Rolling stock (buses, trains, trams)

For three years, social/environmental audits have been conducted on the production sites of the main bus components (assembly, traction, batteries). The audits are carried out by independent agencies. In addition to this process, which is in the consultation phase, a manufacturer audit campaign is scheduled for 2020. For railway rolling stock (RER, metro, tram), RATP internal auditors lead the quality/environment controls in situ for suppliers providing parts that are deemed critical.

Clothing

Working conditions and compliance with human rights are frequently singled out in the clothing industry. Since 2000, RATP has implemented systematic social audits on clothing sites. The results are used to determine whether the contract is awarded or not. These audits are carried out by independent agencies. Suppliers are aware of RATP's high standards and non-complying sites are now rare.

RATP on-site controls

The external contractors who work in RATP stations and work sites are subject to regular inspections, in particular to ensure that they comply with hygiene and safety regulations and that their employees are legally compliant. In the event of non-conformity, measures are taken and companies are placed under increased surveillance. A commission (CISE – common information-sharing environment) ensures the reporting and monitoring of these irregularities.

> Key indicator

Number of social audits carried out during the year (clothing industry)	2017	2018	2019
RATP	9	12	15

Social audits are mainly carried out in the clothing sector.

The fight against illegal employment

Aware of the risks associated with illegal employment in labour-intensive markets, in particular works contracts, RATP has had an in-house procedure since 2010 that defines departments' duties and responsibilities. In addition, as part of the Grand Paris CSR Charter, RATP has undertaken to combat undeclared work.

The means used in this fight include, in particular:

- the use of e-certification services facilitating the collection of regulatory documents from suppliers and subcontractors (Urssaf, Kbis, and foreign workers). These documents are required before the contract is awarded, then every six months during the contract
- work site access control: in 2017 the procedure for issuing access cards was strengthened, and on-site inspections are carried out by RATP itself or by outside service providers.

Indicator table

STRATEGIC FOCUS 1: BE A MAJOR PLAYER IN MOBILITY AND SUSTAINABLE CITIES

	2017	2018	2019	Target
Guideline 1.1. Establish a global, connected mobility solution accessible to all				
Network protection and security officers average daily on-duty time – RATP (shift hours/day)	535	561	587	
Trends in rail network accidents – RATP (number of accidents per year per million commercial kilometres)	_	12.11	11.51	
Trends in bus network accidents – RATP (accident rate per 100,000 km)	7.01	6.72	6.58	
Passenger satisfaction rate – RATP (source: Île-de-France Mobilités perception survey)	81.4%	80.6%	82.0%	
Percentages of bus routes in Île-de-France that are accessible to people with reduced mobility – RATP	79%	83%	85%	100% by 2022
Percentage of RER stations in Île-de-France that are accessible to people with reduced mobility – RATP	97%	97%	98.5%	100% by 2021
Percentage of assistance staff members in stations trained to assist people with mental disabilities (S3A label) – RATP	37%	52%	72%	100% by 2020
Guideline 1.2. Act to protect environmental health				
Number of Facilities classified for environmental protection formal notices – RATP	1	0	0	0
Number of Facilities classified for environmental protection formal notices – RATP, RATP Dev	1	0	0	
Particulate matter levels in the three stations on the Squales network in $\mu g/m^3 - RATP$ (average concentration of PM10 particles in $\mu g/m^3$)	113	92	76	
Number of people exposed (noise black spots) – RATP	334	334	334	0 by 2020
Number of noise- and vibration-related complaints and claims – RATP	473	498	566	
Number of noise- and vibration-related complaints and claims – RATP, RATP Real Estate	473	523	673	
Percentage of rolling stock with a low noise level (buses, railways) – RATP	_	54%	53%	
Number of electromagnetic field measurements carried out during the year – RATP	900	748	268	
Guideline 1.3. Encourage urban integration and functional diversity				
Number of housing units built (total) – RATP, RATP Real Estate, RATP Habitat	928	1,102	1,102	2,000 by 2024
Number of social housing units (total) – RATP Habitat	855	899	954	1,000 by 2024
Number of hectares of greenery planted – RATP, RATP Real Estate	1.3	2.1	2.2	4 by 2020, 1.3 of which will be urban agriculture

STRATEGIC FOCUS 2: REDUCE OUR ENVIRONMENTAL FOOTPRINT

	2017	2018	2019	Target
Guideline 2.1. Reduce our carbon footprint and save resources				
Total energy consumption (in GWh) – RATP, RATP Real Estate	2,513	2,506	2,418	
Total energy consumption (in GWh) – RATP, RATP Dev, RATP Real Estate	3,324	3,314	3,245	
Including energy consumption for traction purposes (all modes included) – RATP, RATP Dev, RATP Real Estate (in GWh)	2,609	2,610	2,571	
Percentage of energy consumption for rail traction – RATP	39%	39%	39%	
Percentage of energy consumption for bus traction – RATP	35%	35%	36%	
Percentage of energy consumption for buildings and auxiliary vehicles – RATP	26%	26%	25%	
Reduction in energy consumption per passenger.kilometre compared to 2015 – RATP	5%	6%	8%	-20% by 2025
Reduction in greenhouse gas emissions per passenger.kilometre compared to 2015 – RATP	6%	9%	13%	-50% by 2025
Total greenhouse gas emissions linked to energy consumption – RATP, RATP Real Estate (tonnes of CO_2 equivalent)	400,015	397,033	372,908	
Total greenhouse gas emissions linked to energy consumption – RATP, RATP Dev, RATP Real Estate (tonnes of CO_2 equivalent)	688,771	640,952	711,866	

	2017	2018	2019	Target
Total greenhouse gas emissions from RATP and RATP Real Estate traction (tonnes of CO_2 equivalent)	327,805	327,599	311,851	
Total greenhouse gas emissions from RATP, RATP Dev and Real Estate traction (tonnes of CO_2 equivalent)	587,171	538,722	620,600	
Greenhouse gas emissions from buildings and auxiliary vehicles – RATP, RATP Real Estate (tonnes of ${\rm CO_2}$ equivalent)	72,210	69,434	61,057	
Greenhouse gas emissions from buildings and auxiliary vehicles – RATP, RATP Dev, RATP Real Estate (tonnes of ${\rm CO_2}$ equivalent)	101,600	102,230	91,266	
Total water consumption – RATP, RATP Real Estate (in m³)	917,478	912,214	879,927	
Total water consumption – RATP, RATP Dev / RATP Real Estate (in m³)	1,223,340	1,250,212	1,379,450	
Guideline 2.2. Develop the circular economy				
Total amount of waste – RATP, RATP Real Estate (tonnes)	19,939	26,858	26,727	
Total amount of waste – RATP, RATP Dev, Real Estate (tonnes)	21,908	28,990	28,612	
Including hazardous waste (off-site) – RATP, RATP Real Estate (tonnes)	4,635	4,458	4,212	
Including hazardous waste (off-site) – RATP, RATP Dev, Real Estate (tonnes)	5,501	5,348	4,879	
Including non-hazardous waste (off-site) – RATP, RATP Real Estate (tonnes)	15,304	22,400	22,514	
Including non-hazardous waste (off-site) – RATP, RATP Dev, RATP Real Estate (tonnes)	16,407	23,641	23,732	
Total amount of waste recycled – RATP, RATP Real Estate (tonnes)	_	26,856	26,727	
Amount of waste recycled for re-use (tonnes)	_	1,077	402	
Amount of waste recycled for material recovery (tonnes)	_	20,346	21,222	
Amount of waste recycled for energy recovery (tonnes)	_	4,691	4,317	
Amount of waste recycled for organic recovery (tonnes)	-	547	572	
Amount of waste recycled through other recovery methods (tonnes)	_	195	214	
Amount of ballast (off-site) – RATP (tonnes)	_	5,409	8,510	
Guideline 2.3. Promote continuous improvement and eco-design measures				
Number of industrial sites ISO 14001 certified – RATP	80	82	89	
Number of industrial sites ISO 14001 certified – RATP, RATP Dev	81	83	91	
Percentage of industrial sites ISO 14001 certified – RATP	82%	89%	96%	100% by 2020

STRATEGIC FOCUS 3: CONFIRM OUR SOCIAL RESPONSABILITY

	2017	2018	2019	Target
Guideline 3.1. Contribute to economic vitality and solidarity in regions				
Number of direct, indirect, and induced jobs resulting from RATP businesses	128,603	128,000	128,000	
Number of indirect jobs and procurement-induced jobs (billed turnover) – RATP	43,876	43,500	43,500	
Amount of solidarity purchases – RATP, RATP Real Estate (in millions of euros)	1.2	1.3	1.3	1.4 by 2020
Number of completed hours dedicated to inclusion – RATP, RATP Real Estate	420,000	385,000	530,000	
Number of recipients (of inclusion hours) – RATP, RATP Real Estate	763	749	900	
Percentage of SMEs among suppliers – RATP, RATP Real Estate	66.7%	66.4%	64.7%	
Number of participants in the Ateliers mobilité® – RATP	3,313	3,173	3,138	3,000
Average number of homeless people assisted each day – RATP	115	117	103	
Rates of assistance provided in directing homeless people to social support services – RATP	69%	73%	71%	
Number of direct and indirect participants in RATP Group Foundation's projects	40,088	44,383	80,885	
Number of projects supported by the Foundation – RATP Group	57	69	64	
Guideline 3.2. Promote management that encourages staff commitment				
Total workforce – RATP	45,756	46,064	46,575	
Total workforce – RATP, RATP Dev, RATP Real Estate	57,326	59,889	59,544	

	2017	2018	2019	Target
Turnover rate – RATP	7.41%			laiget
Number of employees hired – RATP		3,761		
Number of employees hired – RATP Dev, RATP Real Estate	4,117 5,988	7,518	4,538 7,279	
Number of employees leaving – RATP				
Number of employees leaving – RATP RATP Dev, RATP Real Estate	3,713		3,887	
	5,436	5,725	6,039	
Number of work/study contracts – RATP	417	559	773	
Number of work/study contracts – RATP, RATP Real Estate	423	565	784	
Promotion rate in relation to the reason for leaving – RATP	12.0%	11.6%	11%	
Mobility rate – RATP			11%	
Operator		5%	6%	
Management		14.2%	13%	
Average wage increase – RATP	2.64%	2.30%	2.60%	
Total number of training hours – RATP			1,901,388	
Total number of training hours – RATP, RATP Dev, RATP Real Estate			2,152,868	
Percentage of women in the total workforce – RATP	20.6%	20.6%	21%	
Percentage of women in the total workforce – RATP Dev	14.0%	16.4%	14.8%	20% by 2022
Percentage of women in the total workforce – RATP, RATP Dev, RATP Real Estate	19.3%	20%	19.7%	
Percentage of women holding management positions – RATP	14%	19%	20%	
Percentage of women holding management positions – RATP, RATP Real Estate	14.3%	19.2%	20%	
Percentage of women holding management positions – Senior management – RATP Dev	29.9%	30.1%	30.9%	30% by 2022
Percentage of women recruited – RATP	23.2%	19.2%	21.5%	23% by 2021
Number of employees declared as disabled – RATP	1,610	1,683	1,702	
Number of employees declared as disabled – RATP, RATP Dev	1,804	1,875	1,874	
Conflict rate – RATP (number of days off work due to strikes / average number of employees)	0.5	0.56	4.42	
Sickness absenteeism rate – RATP	11.02	11.13	13.12	
Sickness absenteeism rate – RATP, RATP Dev, RATP Real Estate	10.77	10.29	12.25	
Number of occupational accidents – RATP	1,928	1,893	1,788	
Number of occupational accidents – RATP, RATP Dev, RATP Real Estate	2,584	2,558	2,536	
Number of employees awaiting reclassification after being declared permanently unfit to perform their jobs – RATP	286	284	265	Halve by 2020 (compared to 2015)
Occupational accident frequency rate – RATP (number of occupational accidents with time off work x 1,000,000 / number of hours worked)	32	31.36	30.12	Halve by 2020 (compared to 2015)
Occupational accident frequency rate – RATP, RATP Dev, RATP Real Estate	27.77	26.5	26.89	
Occupational accident severity rate – RATP (number of days lost due to occupational accidents x 1,000 / number of hours worked)	2.63	2.88	2.84	Halve by 2020 (compared to 2015)
Occupational accident severity rate – RATP, RATP Dev, RATP Real Estate	2.12	2.21	2.31	
Percentage of operational units OHSAS 18001/ISO 45001 certified – RATP	50%	55%	60%	100% by 2020
Guideline 3.3. Ensure fair practices in the value chain				
Number of social audits carried out during the year – RATP	9	12	15	
Total number of audits since 2000 – RATP	83	95	110	
Total number of audited sites rejected since 2000 – RATP	6	6	7	
Number of whistle-blower reports – RATP	_	_	50	
Number of notifications sent to CNIL (French data protection authority) in the event of personal data breaches – RATP	-	0	1	
Number of notifications sent to CNIL in the event of personal data breaches – RATP, RATP Real Estate, RATP Habitat, RATP Travel Retail, RATP Connect	_	0	1	

Methodology note on the non-financial performance declaration, fiscal year 2019

General framework

RATP Group applies the European directive of 22 October 2014 and its implementing decree of 9 August 2017 regarding the requirement for large companies to provide a non-financial performance declaration. More specifically, by drawing up a consolidated non-financial performance declaration, RATP Group is subject to the regulatory duty of its subsidiary RATP Dev.

The reference texts are:

- the European directive of 22 October 2014 and the guidelines on non-financial information;
- the order of 19 July 2017;
- the implementing decree of 9 August 2017;
- the energy transition law for green growth of 18 August 2015;
- law no. 2018-938 on the balance of trade relations in the agricultural and food industry, and healthy, sustainable and accessible food for all:
- law no. 2018-898 of 23 October 2018 on eliminating fraud.

The following topics have not been addressed, as they are not applicable to the Group's businesses:

- eliminating food insecurity;
- respect for animal welfare and responsible, fair, sustainable food.

Non-financial risks

In accordance with the regulatory requirements of implementing decree no. 2017-1180 of 19 July 2017, the Group has assessed its main environmental, social, human rights, and anti-corruption risks and opportunities. The analysis was carried out in three core steps:

- the definition of the Group's non-financial risk environment with around forty risks and opportunities. This was established using information from the Group's risk environment, a sectoral bibliographic research, recognised reference systems such as MSCI and SASB, as well as the materiality analysis already carried out by the Group in 2017;
- 2. the rating of each CSR risk and opportunity by experts in the field. The rating scale was established with the Group's Risk Management department based on a methodology similar to the one used to establish the Group's mapping. The risks were assessed in terms of impact severity and occurrence;
- the ranking of CSR risks and opportunities. Impact and occurrence assessments have allowed the ranking and identification of the Group's priority risks, which were approved by a non-financial performance steering committee.

These three steps represent the risk management process implemented by the Risk Management department. Mapping is already included in the Group's risk environment.

Business model

The business model is based on the operation of a transport network, which is the Group's core business. It is adapted to the contractual terms and conditions of each transport network.

Non-financial reporting scope

This reporting scope covers 91.9% of consolidated turnover on 31 December 2019. The exact scope is specified for each indicator. It varies from one indicator to another. Barring some indicators, the overall scope of the non-financial performance declaration is as follows for:

- the qualitative aspect: RATP EPIC, 58 RATP Dev subsidiaries, RATP Real Estate, and RATP Smart Systems;
- the quantitative aspect: RATP, 26 RATP Dev subsidiaries and RATP Real Estate.

Some indicators have a specific scope such as:

- the number of housing units built, including social housing: this exclusively involves RATP, RATP Real Estate, and RATP Habitat;
- the number of direct and indirect beneficiaries of projects, and number of projects supported by the Foundation: this involves RATP Group in its entirety, i.e. RATP and all its subsidiaries;
- the number of notifications sent to CNIL in the event of personal data breaches: this involves RATP and its subsidiaries, RATP Real Estate, RATP Habitat, RATP Travel Retail, RATP Connect.

Reporting schedule

In order to include the non-financial performance declaration in the company's financial report, this declaration schedule has been aligned with the financial reporting schedule: they now both cover the 2019 civil calendar and fiscal year. Non-financial information is applied to the full calendar year, *i.e.* the period from 1 January 2019 to 31 December 2019 (twelve months).

Organisation

A single reporting protocol defines the collection methods and indicators. This protocol is shared and applied to ensure an aligned, consistent, and accurate collection of indicators. The indicator collection process is based on several levels depending on the entities involved. The Financial division ultimately consolidates Group figures. Qualitative information is collected through interviews and surveys.

Data collection varies from one structure to another. It is carried out using existing tools and dedicated information systems for human resources, purchasing, water and energy consumption, safety, etc.

Particularities and methodological limits

The non-financial performance declaration is methodologically limited for several reasons: the lack of alignment between national and international definitions and legislation, imprecise margins for calculating data over a calendar year (with invoices or data arriving at a later date), etc.

Human resources

- With regard to the "number of employees leaving" ("Hires and departures" indicator), all departures during probationary periods are taken into account, regardless of whether they were initiated by the employee or the employer.
- Authorised leaves, in the case of RATP, are not taken into account in number of absent staff.
- Although staff on subsidised contracts and doctors are excluded from the total workforce, they are taken into account when it comes to accidents, training, disability, hiring and departures.
- A constant difference of around 2 to 3% is observed each year for the "Occupational accidents" indicator between the data on the indicator's closing date and the consolidated data. This is due to the regulatory timeframes for the investigation of employee claims and occupational accident declarations by healthcare funds.
- The number of RATP training hours is calculated based on training provided under the training plan.
- In 2019, RATP Dev fell outside the consolidation scope for the "Number of work-study contracts" indicator.
- The turnover rate is calculated based on the arrivals and departures for year N excluding subsidised contracts and doctors.
- Regarding disability, it should be noted that RATP Dev subsidiaries located in the US (including RATP Dev NA Bus) do not report on this data due to local regulatory requirements and are excluded from the reporting scope.

Environmental data

- Environmental data calculated based on meter readings or invoices excludes data unavailable on the management report issue date. Missing information is not estimated in the current data (water consumption indicator).
- When it comes to monitoring waste, some subsidiaries do not have the means to evaluate or weigh the amount of everyday municipal waste. Therefore, a portion of this waste is not recorded in the consolidated data. Given the reduction in waiting times for the publication of accounts, it should be noted that input for these indicators stopped earlier than last year. This explains the downward variation.
- The main sources of greenhouse gas emissions were also specified, in accordance with decree no. 2016-1138 of 19 August 2016 on environmental information in the management report. With regard to indicators for energy consumption and greenhouse gas emissions, corrections were made for 2019 following the updating of the Ademe carbon database in December 2019.
- The indicator regarding "Individuals exposed to the threshold limit of the EU directive 2002/49/EC" is calculated without considering the index used. The limit thresholds set by the directive exceed the Lden index (day evening night noise level) by 73 dB(A) and the Ln index (night noise level) by 65 dB(A) for the rail mode. The proposed indicator therefore represents the cumulative number of people exposed to the maximum threshold of the directive regardless of the Lden and Ln index and regardless of mode.

- In 2019, RATP Dev fell outside the consolidation scope for the "Number of noise and vibration related complaints and claims" indicator.
- For the air quality indicator regarding "Particulate matter rate in the three stations on the Squales network", it should be noted that the Châtelet metro station was closed for works in 2018 and that the Auber station was closed in 2019 for renovation. These changes in the measurement scope may impact the data.
- For the indicator regarding the "Number of electromagnetic field measurements carried out during the year", the calculation is based on the publication of test reports with corresponding case numbers.

Accessibility

The indicator regarding the "Percentage of assistance staff in stations trained to assist people with mental disabilities (S3A label)" is calculated based on the number of staff members assigned to this job.

Socio-economic footprint

The socio-economic footprint is calculated based on the average for the years 2015, 2016, and 2017, and a performance model of the French economy using Eurostat's input/output tables.

The results presented in the 2019 report stem from this study (no new iteration in 2019).

Railway safety

The indicator regarding "Trends in rail network accidents" is the sum of all rail safety-related operating events excluding minor cases of smoke inhalation, evacuations, and suicides. The following categories of events are excluded from the indicator: homicides and illness. The Montmartre funicular is excluded from this scope.

From 2019, the rail network accident indicator for combined metro/ RER/tram lines records all "declared" individual passenger incidents, but exclusively those involving emergency services. This change follows a new definition for victims put forward by the STRMTG (state service in charge of regulating and monitoring the safety of guided transport). The change was formalised in the new version of the STRMTG application guide from November 2019, which defines the events to be taken into account for calculating the indicators submitted to the STRMTG in the annual operational safety reports. In the report, the indicators calculated with this new methodology have been updated for 2018 and 2019 (2017 unavailable).

Road safety

The indicator regarding "Trends in Bus network accidents" is the sum of all road safety-related operating events, excluding passengers who have taken ill. Bus routes chartered by RATP are excluded from the indicator.

Whistle-blower reports

The indicator regarding the "Whistle-blower reports" is the sum of the number of alerts collected in the RATP and subsidiaries mechanism and those resulting from the RATP Dev mechanism. The reports correspond more to employees' personal situations falling within the scope of human resources than that of the Sapin II law (whistle-blower protection).

Correspondence table

			UN Global Compact	
Non-financial performance declaration category	Pages	ISO 26000	principles	SDGs
Group stakeholders	8	5.3.3/6.8.3	#1-10	17
Group CSR challenges	50	5.3.3/6.8.3	#1-10	17
Group CSR policy	51	6.2	#1-10	16/17
Governance	52	6.2	#1-10	16/17
Innovation for sustainable cities	55	6.5.2	#9	9
1 – Be a major contributor to sustainable mobility and sustainable cities				
1.1 – Establish a connected and accessible mobility offering	55	6.5/6.7/6.8	#1 #9	1/3/8/9/10 /11/16/17
Passenger safety as an absolute priority	55	6.7.4	#1 #2	3/16
Embodying sustainable mobility and smart cities for our passengers	57	6.7.5	#1 #8 #9	9/10/11
Fighting against insecurity in public transport	59	6.8.3	#1 #2	1/8
For a more inclusive society: inclusive mobility access, a human and technical challenge	60	6.7.2	#1 #8 #9	8/10/17
1.2 – Act in favour of environmental health	62	6.5	#7	3/11
Making station air quality an environmental priority	62	6.5.3	#7	3/11
Reducing noise and vibration pollution	62	6.5.3	#7	3/11
Bringing the exposure to electromagnetic waves under control	64	6.7.4	#1 #2	3
1.3 - Encourage urban integration and mixed-use development	64	6.5	#1 to #10	11
Restructuring industrial sites to promote urban diversity	65	6.5.3	#8	11
Committing to the smart and sustainable use of buildings	65	6.5.3	#8	11
2 - Reduce our environmental footprint				
2.1 – Reduce our carbon footprint and saving resources	65	6.5/6.7	#7 #8 #9	7/13
Taking action regarding climate change and energy transition	66	6.5.5	#7#8 #9	7/ 13
Taking action to bring environmental risks under control	67	6.5.3	#7	7/13
2.2 - Develop the circular economy	68	6.5/6.7	#7 #8 #9	6/9/12/13
Promoting industrial and regional ecology	68	6.5.2 6.5.3	#8	6
Water, waste material and food waste	69	6.5.4/6.5.5/6.7.5	#7#8 #9	6/9/12 / 13
2.3 - Promote continuous improvement and eco-design measures	69	6.5.4/6.7.5	#8 #9	9/12
3 – Confirm our social responsability				
3.1 - Contribute to economic vitality and solidarity in regions	70	6.8	#1	1/4/8/10
RATP's socio-economic footprint in France (2015-2017)	71	6.8.3	#1	1/8
Promoting social inclusion and vocational integration	71	6.8.3	#1 to #10	1/8
Encouraging regional action	72	6.8.3	#1 to #10	1/8
Purchasing as a factor for employing the most vulnerable groups of people	72	6.8.3	#1 to #10	1/8
Purchasing practices in favour of SMEs	73	6.8.3	#1 to #10	1/8
Fighting against extreme exclusion	73	6.8.3	#1 #2	1/8
The Foundation for regions	73	6.8.3	#1	1/4/5/6/8/10/11/12/17
3.2 - Promote management that encourages staff commitment	74	6.3/6.4	#1 #3 #6	1/3/4/ 5/8/10
Optimising skills management	74	6.4	#6	4
Making diversity a success factor	75	6.4.4/6.4.7	#6	4/8

Non-financial performance declaration category	Pages	ISO 26000	UN Global Compact principles	SDGs
Ensuring equal opportunities in the workplace and wage equality between women and men	75	6.3.7/6.3.10	#1 #2 #4 #5 #6	1/3/5/8/10
Employment and inclusion of people with disabilities	76	6.3.7/6.3.10	#1 #6	1/8/10
Promoting aligned, local social dialogue	76	6.4.4/6.4.5	#3	3/17
Preventing occupational risks and promoting health for RATP employees	77	6.4.4 6.4.6	#1 #2 #6	3/8
3.3 - Ensure fair practices in our value chain	77	6.6/6.7	#1 to #10	10/11/12/16
Ethics underpin our actions and our behaviour at the service of our customers	77	6.6.3	#1 to #10	16
A compliance programme for increased vigilance regarding business conduct	78	6.6.3	#1 to #10	16
Personal data management	78	6.6.3	#1 to #10	16
Risks and vigilance in the supply chain	78	6.6.6/6.7.3	#1 to #10	8/10/11/12

Report from one of the Statutory Auditors

Report from one of the Statutory Auditors, appointed as an independent third-party body, on the consolidated voluntary non-financial performance declaration

Fiscal year ending on 31 December 2019

To the general assembly,

In our capacity as the Statutory Auditor of your establishment (hereinafter referred to as the "Entity") appointed as an independent third-party body, accredited by Cofrac (French accreditation committee) under number 3-1049(1), we hereby present our consolidated non-financial performance declaration report for the fiscal year ended 31 December 2019 (hereinafter referred to as the "Declaration"). The Declaration is presented voluntarily in the management report in accordance with the legal and regulatory provisions of articles L. 225-102-1, R. 225-105, and R. 225-105-1 of the French commercial code.

The Entity's responsibility

It is the Board of Directors' responsibility to prepare a Declaration in accordance with legal and regulatory provisions, including a presentation of the business model, a description of the main non-financial risks, a presentation of the policies applied regarding these risks and the results of these policies, including key performance indicators.

The Declaration has been drafted by applying the Entity's procedures (hereinafter referred to as the "Standard"), the significant aspects of which are presented in the Declaration and available on request from the Entity's headquarters.

Independence and quality control

Our independence is defined by the provisions of article 822-11-3 of the French commercial code and the profession's code of ethics. In addition, we have implemented a quality control system that includes documented policies and procedures to ensure compliance with applicable legal and regulatory texts, ethical rules, and professional standards.

Responsibility of the auditor appointed as an independent third-party body

It is our responsibility, based on our work and in the context of your Entity's voluntary approach, to formulate a reasoned opinion providing a limited level of assurance on:

- the Declaration's compliance with the provisions of article R. 225-105 of the French commercial code;
- the fairness of the information provided in accordance with the third paragraph of I and II of article R. 225-105 of the French commercial code, namely the results of policies, including key performance indicators, and actions relating to the main risks, hereinafter referred to as the "Information".

However, it is not our responsibility to comment on the Entity's compliance with other applicable legal and regulatory provisions, in particular with regard to the vigilance plan, the fight against corruption and tax non-compliance, nor on the compliance of products and services with applicable regulations.

Work type and scope

Our work described below was carried out in accordance with the provisions of articles A. 225-1 et seg. of the French commercial code, with the professional standards of the Compagnie nationale des commissaires aux comptes (French institute of statutory auditors) for this work, and with the international standard ISAE 3000(2):

- we reviewed the activities of all entities included in the consolidation scope and the main risks associated with these activities;
- we assessed the Standard's appropriateness in terms of its relevance, completeness, reliability, neutrality, and comprehensibility, taking industry best practices into consideration, where applicable;
- ·we ensured that the Declaration covers each social and environmental information category provided for in III of article L. 225-102-1;
- we ensured, when relevant to the main risks or policies presented, that the Declaration presents the information provided for in II of article R. 225-105, and if necessary includes an explanation of the reasons justifying the absence of the information required by the 2nd paragraph of III of article L. 225-102-1;
- we ensured that the Declaration presents the business model and a description of the main risks related to the activity of all entities included in the consolidation scope. This description may include, when relevant and proportionate, the risks brought about by its business relationships, its products or its services, as well as the policies, actions, and results, including key performance indicators associated with the main risks;

⁽¹⁾ The accreditation scope of which is available on the website www.cofrac.fr.

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

MANAGEMENT REPORT Report from one of the Statutory Auditors

- we consulted documentary sources and conducted interviews in order to:
 - assess the selection and validation process for the main risks as well as the consistency of results, including the key performance indicators which were selected based on the main risks and policies presented,
- confirm the qualitative information (actions and results) that we considered to be most important(3). Our work was carried out at the level of the consolidating Entity;
- we ensured that the Declaration covers the consolidated scope, i.e. all entities included in the consolidation scope in accordance with article L. 233-16 with the limits specified in the Declaration;
- we assessed the internal control and risk management procedures set up by the Entity and we assessed the collection process to ensure that the Information is complete and accurate;
- we implemented the following on key performance indicators and other quantitative results(4) that we considered to be most important:
- analytical procedures to ensure the correct consolidation and consistency in the trends with regard to the data collected,
- detailed tests on a sample basis to check the correct application of definitions and procedures and reconcile the data against supporting documents. This work was carried out with a selection of contributing entities(5) and covers between 79% and 100% of the consolidated data selected for these tests;
- we assessed the Declaration's overall consistency against our knowledge of the entities included in the consolidation scope.

We consider that the work we carried out in exercising our professional judgement allows us to provide a limited level of assurance; a higher-level assurance would have required more extensive audit work.

Means and resources

Our work mobilised the skills of five people and was carried out between November 2019 and March 2020 for a total working period of five weeks.

To assist us in carrying out our work, we called on our specialists in sustainable development and social responsibility. We conducted approximately 15 interviews with those responsible for drafting the Declaration, notably representing the management teams from administration and finance, risk management, compliance, human resources, health and safety, and environment.

Conclusion

With regard to our work, we did not identify any material anomaly that could call into question the fact that the consolidated voluntary non-financial performance declaration complies with the voluntarily applied regulatory provisions and that the Information, taken in its entirety, is presented fairly and in accordance with the Standard.

Paris-la Défense, 10 March 2020

KPMG SA

Anne Garans Associate Sustainability Services Stéphanie Millet Associate

⁽³⁾ Qualitative information (actions and results) considered to be most important: Actions undertaken for passenger safety, Policies for health and safety at work, Measures to encourage equal opportunities in the workplace and wage equality between women and men, Policies for social dialogue, Mechanisms for a connected, accessible-for-all mobility range, Measures for better air quality, Actions to reduce noise pollution, Carbon footprint and resource management, Measures encouraging the circular economy, Economic impact in regions, Policies encouraging business ethics, Policies for personal data management.

⁽⁴⁾ Key performance indicators and other quantitative results considered to be most important: Social information: Average daily time spent by GPSR (groupe de protection et de sécurisation des réseaux) on the networks, Tiends in rail network accident rate, Trends in bus network accident rate, Conflict rate, Occupational accident severity rate, Rate of operational Units certified to OHSAS 18001 / ISO 45001, Number of whistle-blowing reports through the ethics alert system.

Environmental information: Total all-use and all-type energy consumption, Particulate matter rate in the three underground stations on the Squales network, Number of (electromagnetic field) measurements carried

⁽⁵⁾ RATP EPIC and three RATP Dev entities: London United Busways (UK), RATP Dev Casablanca (Morocco), and RDLA (France).

Corporate governance report

Composition of the Board of Directors and terms of office	90
Compensation and benefits	92
Diversity policy	93
Appendix 1 – List of directors and their terms of office at 31 December 2019	93

2019 corporate governance report

1 — Composition of the Board of Directors and terms of office

1.1 Composition

In accordance with French decree no. 84-276 of 13 April 1984, as amended by French decree no. 2004-500 of 7 June 2004 and French decree no. 2006-1018 of 11 August 2006, RATP's Board of Directors comprises 27 members, as follows:

- nine French State 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 the company's employees under the conditions laid down in chapter II of law no. 83-675 of 26 July 1983 on the democratisation of the public sector.

The Board nominates one of the directors as Chairman 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.

A list of directors and their terms of office appears in the appendix.

1.2 Functioning

In accordance with article 6 of French decree no. 59-1091 of 23 September 1959 on the legal form of Régie autonome des transports parisiens, the Board of Directors deliberates on:

- the location of RATP's headquarters;
- the agreement to be made with Île-de-France Mobilités and its amendments;
- issues relating to the status of employees;
- budget forecasts and revisions thereto;
- investment and upgrade programmes for equipment and facilities;
- planned works or supplies, except for those that the Chairman is responsible for approving;
- contracts that must be submitted to the Railway Procurement Board;
- borrowings, with requests, if necessary, for approval from the competent authorities and guarantees from local authorities;
- the acquisition, extension or disposal of equity investments;
- legal actions, transactions and withdrawals;
- the acquisition or disposal of any real property assets, the leasing or leaseback of any fixed assets if the lease is for a term of more than nine years;

- the financial statements for each financial year;
- the granting of occupancy rights for State-owned public land pursuant to articles L. 34-1 to L. 34-9 of the French State property code and article 3 of law no. 94-631 of 25 July 1994;

The Board of Directors may delegate some of its powers to the Chairman and Chief Executive Officer.

The Board has also adopted its own internal rules in accordance with article 6-12 of French decree no. 59-1091 of 23 September 1959 on the legal form of RATP.

The Board approves contracts exceeding €60 million, upon the advice of the Commission de la modernisation technique et technologique et du transport (CMTTT) – technical and technological transport modernisation committee, which has a right of evocation for contracts worth between €5 million and €60 million.

It delegates to the Chairman and Chief Executive Officer its powers for the acquisition, extension or disposal of equity investments of a nominal amount of less than €15 million and for the reclassification of securities between RATP and its majority-owned subsidiaries.

It sets at €2 million the threshold below which the Chairman and Chief Executive Officer is authorised to decide on the acquisition and disposal of all fixed assets, in accordance with article 8-d of the French decree of 23 September 1959 on the legal form of RATP.

For subsidiaries and equity investments, the Chairman and Chief Executive Officer appoints RATP's representative at the shareholders' meetings and Board meetings of companies in which RATP holds stakes 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 strategic plan and budget.

1.3 Conditions for the preparation and organisation of the Board's work

The Board's secretary is nominated by the Chairman 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 re-elect the Board or Chairman.

The Board of Directors has three committees, plus a committee to prepare the decisions submitted to the Board and provide it with further information:

- the CMTTT examines proposals for technical and technological development and modernisation, such as network maintenance and development, quality of service improvements, research and procurement;
- the Economic Strategy Committee deals with economic and strategic matters, such as operating budgets and investment plans, financial statements and social issues, including training, development, subsidiary activities and the annual and sustainable development reports;

- the Innovation and Customer Service Committee monitors performance of the RATP-Stif agreement and service quality indicators. It also examines plans for new innovative services;
- the Audit Committee is responsible for monitoring the process of preparing financial information, ensuring the effectiveness of the internal control and risk management systems, the statutory audit of the consolidated annual financial statements by the Statutory Auditors and the independence of the Statutory Auditors. Together with the Economic and Strategy Committee, it reviews the annual budget of the EPIC and the Group.

It is responsible for advising the Board on the parent company and consolidated financial statements and on the reliability of the ISs used to prepare them. It also advises on financial management, management and accounting principles, cost accounting, developments relating to accounting ISs and management control, as well as the internal audit programme, the quality of internal audit methods and risk management policies.

1.4 Work of the Board of Directors

During the ten meetings (seven ordinary, two special and one extraordinary) held in 2019, the following matters were discussed:

Implementation of the 2019-2024 term

The Board of Directors held an extraordinary meeting on 23 July 2019 for the implementation of the 2019-2024 term. The agenda was as follows:

- nomination of the Chairman and Chief Executive Officer;
- composition and appointment of chairpersons and vice-chairpersons of:
- the Economic Strategy Committee,
- the Technical and Technological Transport Modernisation
- the Innovation and Customer Service Committee;
- composition of the Audit Committee.

Strategy

- Changes to the organisation chart of RATP Group subsidiaries: creation of RATP Participations and RATP Paris Région.
- Presentation of the CEO's strategic guidelines for the 2019-2024
- Updating of RATP Développement's strategic plan.
- Preparations ahead of negotiations for the next Île-de-France Mobilités contract.
- Performance plan for the support functions.

Network development and modernisation

- Approval of a works contract for laying railway track on line 14 of the metro (the planned extension between Olympiades and Orly Airport, from Maison-Blanche to the airport terminus).
- Approval of a maintenance and modernisation contract for Tetra network infrastructure.
- Approval of the contract to supply electric buses.
- Approval of a contract for the design and supply of the rail undercarriage for metro lines 3, 3 bis, 7, 7 bis, 8, 10, 12 and 13.
- Approval of amendment 2 to the supply contract for tram components and associated services.
- Approval of a framework agreement for electrical installation works for the conversion of bus depots.

- Approval of the project proposal for the westward extension of the T3 tram service.
- Approval of amendment 1 to the contract for an automated train operating system to run on line 4 of the metro and its extension to Bagneux.
- Approval of the contract for the partial upgrading of high-voltage substations.
- Approval of the framework agreement on building adaptation works for the conversion of RATP bus depots to electricity and NGV.
- Approval of a contract for the partial upgrading of high-voltage substations.
- Approval of the project proposal as part of the master plan for the southbound RER line B: construction of sidings in Saint-Rémy-lès-Chevreuse, adaptation of RER line B infrastructure to next-generation interconnected rolling stock (MING) - phase 1.
- Approval of the project proposal as part of the master plan for RER line A: addition of a new entrance on the west side of Val-de-Fontenay station.
- Approval of the project proposal for the development and roll-out of the NExTEO system on RER lines B and D.

Services policy

- Presentation of MaaS.
- Results of the 2018 perception survey.
- Ombudsman's report.

Infrastructure management

• Financing requirements ahead of the resumption of infrastructure management for the Greater Paris public transport network.

Land and real estate

- Approval of plans for the early declassification of a property located in Clichy-la-Garenne.
- Surety bond provided by RATP for SEDP 2 in connection with the transfer of the VAL Bienvenue lease.
- Operation to upgrade the superstructure of the Belliard bus depot.
- Sale of the land and buildings necessary for the Debergue-Netter development project.
- Vaugirard Paris 15 workshop redevelopment project.
- Declassification of a building complex located in Châtillon Montrouge.
- Acquisition of a property located at 34, rue Pierre-et-Marie-Curie in lvry-sur-Seine.
- Modernisation of areas and services linked to RATP's tertiary footprint.

Operating activities

- Rail operational excellence plan.
- Feedback from the IMDM/EPFL audit of RATP's rail safety management policy.
- Rail safety 2018 review and outlook for 2019.
- Update on the new Paris bus network.

Relations with Île-de-France Mobilités

- Amendments 14, 15, 16, 17 and 18 to the agreement between RATP and Île-de-France Mobilités.
- Quarterly follow-up items for the agreement with Île-de-France Mobilités.

Financial topics

- Presentation and approval of the RATP Group consolidated financial statements as at 31 December 2018.
- Presentation and approval of the RATP EPIC parent company financial statements as at 31 December 2018, including the financial statements for Infrastructure Management and Transport Operations.
- Approval of the 2018 corporate governance report.
- Approval of RATP Group's management report as at 31 December 2018, including the financial results, the report on non-financial performance, risk management and the internal control and audit functions.
- Approval of RATP Group's 2018 sustainable development and activity report.
- Approval of RATP Développement's 2020 budget.
- Approval of the RATP EPIC and Group 2020 budget.
- Revision of the operating budget for 2020.
- Capital increase for RATP Coopération in order to subscribe for Systra's capital increases.
- Review of the purchasing policy for 2018.

Human resources

- Presentation of Caisse de coordination aux assurances sociales 2018 financial statements and 2020 budget.
- Approval of 2019 training plan.
- Approval of planned contribution to social welfare.
- Training programme for employee representatives.

Development

- · Final award of the Tuscany contract.
- Presentation of RATP Développement's annual report and halfyearly review of the subsidiary's business activity.
- Presentation of the subsidiaries' strategic and performance plans.

The Board was also briefed by the Chairwoman and Chief Executive Officer on the main events involving RATP Group.

In addition to matters relating to the approval of the financial statements, the Audit Committee reviewed the following:

- in March: approval of the 2018 parent company and consolidated financial statements, including the financial statements for Infrastructure Management and Transport Operations (accounting policies and management analysis), report on non-financial performance (which replaces the CSR report), corporate governance report, Statutory Auditors' report, 2018 internal control report and 2018 review of the Statutory Auditors' additional fees;
- in June: update on the tax audit, presentation of the 2019 finance strategy and 2018 yearly review, presentation of the follow-up to the action plan relating to compliance, risk management and the insurance policy;

- in July: election of the Chairman and Vice-Chairman of the Audit Committee, approval of the half-yearly parent company and consolidated financial statements as at 30 June 2019, presentation of the Statutory Auditors' 2019 audit plan and the Statutory Auditors' presentation on the approval of the financial statements as at 30 June 2019, Statutory Auditors' additional fees position for the first half of 2019;
- in October: presentation of the engineering transformation and creation of the RATP Infrastructures business unit, preparations for the regulation of RATP Infrastructure Management by the French transport regulator (ART), financial structuring of Greater Paris Infrastructure Management, impairment test methodology (Transport Operations/Infrastructure Management), and unveiling of plans to reduce the approval time of the annual and half-yearly financial statements.

2 — Compensation and benefits

2.1 Compensation of corporate officers

Subject to ministerial approval pursuant to article 7 of French decree no. 59-1091 of 23 September 1959, the Board of Directors sets the directors' fees for qualified persons. French State representatives and employee directors do not receive any allowances or compensation.

These allowances, called "directors' fees" are applicable to directors who attend meetings of the Board of Directors, the Audit Committee and the other committees.

They were set at €148 per Board meeting and €74 per committee or working group meeting by a decision of the Board of Directors adopted at its meeting on 9 February 2007. The amounts have not changed since that date.

The compensation of the Chairman of the Board of Directors of RATP is fixed by ministerial order pursuant to article 3 of French decree no. 53-707 of 9 August 1953.

For the 2019 financial year, the gross compensation of Catherine Guillouard, Chairwoman and Chief Executive Officer of RATP, comprises:

- a fixed amount of €322,055 gross (€300,000 gross, on an annual basis, for the period from 1 January to 23 July 2019, and €350,000 gross, on an annual basis, for the period from 24 July to 31 December 2019):
- a variable amount of up to €100,000, which includes quantitative and qualitative performance criteria linked to the economic performance of the company and quality of service for passengers.

The Chairwoman and Chief Executive Officer has received no compensation from a company included in the scope of consolidation, as defined in article L. 233-16 of the French commercial code.

2.2 Agreements between a subsidiary and a director

No agreement as referred to in the second paragraph of article L. 225-37-4 of the French commercial code was entered into between a director and a subsidiary of RATP in 2019.

3 — Diversity policy

3.1 Application of the principle of gender balance on the Board

At 31 December 2019, 44% of the members of RATP's Board of Directors were women. Among government representatives and individual experts, 44% are women. The RATP Board of Directors therefore complies with the provisions of law no. 2014-873 of 4 August 2014 on gender equality.

3.2 Balanced representation of women and men

For years, RATP has observed a policy of equal pay and opportunities for women and men, a commitment enshrined in its contractual policy since 2003. The first company agreement on gender equality also dates from 2003.

In 2015, RATP made gender diversity one of the themes of the 2025 Challenges strategic plan, leading to the creation of the "RATP au féminin" programme. This programme is one of the vectors of collective commitment to promote gender diversity in organisations.

Also in 2015, RATP negotiated a fourth agreement for equal pay and equal opportunities between women and men that covered several themes, including recruitment, training, professional promotion, compensation and work/life balance. The fifth company agreement on equal pay and equal opportunities was signed on 20 March 2019 by all trade unions represented within the company (CFE-CGC, CGT and UNSA).

This policy has produced significant results. For example, RATP's Executive Committee is now gender-balanced, while the percentage of women in senior management has risen from 30% in 2016 to 34% in 2018 and 37% in 2019.

In managerial roles, which account for 10% of the most senior positions, the percentage of women has steadily increased over the last five years. Currently standing at 36%, this is largely due to the near-parity achieved in recruitment (48.25% of managers recruited in 2019 were women).

In addition, RATP scored 80 out of 100 in the gender equality index in 2018, under the French law on the freedom to choose one's professional future. Its aim is to raise this score to 95 out of 100 through pay increases on return from maternity or adoption leave. This measure is already enshrined in the 2019 agreement and was negotiated before the index was calculated.

Appendix 1 – List of directors and their terms of office at 31 December 2019

Appointments and departures of directors

July 2019 saw the start of a new term for the Board of Directors, which will cover the 2019-2024 period. The 27 directors were appointed by the French decree of 19 July 2019. Ms Guillouard was reappointed as Chairwoman and Chief Executive Officer of RATP by the French decree of 24 July 2019.

Apart from this significant development, several other changes were recorded during the year. At the meeting of 1 February 2019, Ms Guillouard announced the departure of Ms Sueur, who stepped down as French State representative on the Board of Directors to join Le Monde group. At the same meeting, Mr Sarrassat was welcomed as secretary of the SEC to replace Mr Cador.

At the meeting of 28 June 2019, the Chairwoman welcomed Ms Bui Khoi Hung as French State representative on the Board. Ms Bui Khoi Hung was appointed by decree of the French Ministry of the Economy and Finance of 19 June 2019 to replace Ms Lepage.

Lastly, Mr Pichard joined the Board as French State representative, appointed by the French decree of 28 November 2019 to replace Mr Charissoux.

At 31 December 2019, the Board was composed as follows:

Na	me	Role	Other positions
FR	ENCH STATE REPRESE	NTATIVES	
Ms	Bui Khoi Hung Isabelle	Head of Transport Holdings – APE	French State representative on the Board of Directors of ADP and Engie
Mr	Cadot Michel	Prefect of the Île-de-France region and prefect of Paris	 The prefect of the Île-de-France region and prefect of Paris is an ex officio member of several boards, including Établissement public Paris La Défense, Établissement public d'aménagement Paris Saclay (EPAPS), Grand Paris Aménagement, and Établissement public foncier d'Île-de-France. The prefect of the Île-de-France region and prefect of Paris is government commissioner of Société du Grand Paris and EPA Secteur IV Marne-la-Vallée France. Other public bodies: The prefect of the Île-de-France region and prefect of Paris sits on the Board of Directors of Société de livraison des ouvrages olympiques (Solideo). He is also a member of the Board of Directors of the public body in charge of the conservation and restoration of Notre-Dame cathedral in Paris. Non-profit organisations and foundations: The prefect of the Île-de-France region and prefect of Paris is chairman of the board of directors of association du corps préfectoral et des hauts fonctionnaires du ministère de l'intérieur. The prefect of the Île-de-France region and prefect of Paris sits on the Board of Directors of the Bettencourt-Schueller Foundation.
Ms	Fau Corinne	Member of the Executive Board of Enedis and Head of Finance, Purchasing and Insurance	Member of the Board of Directors and Audit Committee of LFB SA
Mr	Ferrand Nicolas	Chief Executive Officer of Solideo	No terms of office
Ms	Gay Emmanuelle	Regional and Interdepartmental Head of Equipment and Development in Île-de-France	Board member of EPFIF, GPA, PAP, Solideo, Ports de Paris, APUR, IAU-SGP (Société du Grand Paris) and EPAPS (as alternate member)
Mr	Pichard Laurent	Deputy Director of the Budget Department	Director of SNCF Réseau, Ademe and SGP
Mr	Roche Pierre-Alain	Chairman of the Mobility and Transport Section of the General Council for the Environment and Sustainable Development	No terms of office
Mr	de Romanet Augustin	Chairman and Chief Executive Officer of ADP Group and Chairman of the ADP Group Corporate Foundation	Chairman of the Board of Directors of Domaine national de Chambord (Chambord Estate), a public body Chairman of the Board of Directors of Paris Europlace Lead Director of the listed European company SCOR Chairman of the Compensation Committee and Crisis Management Committee Member of the Supervisory Board of Le Cercle des économistes Member of the Board of Directors of Atout France Director of the endowment fund Institut pour l'innovation économique et sociale (2IES)
Mr	Trutt Didier	Independent Director, Chairman of the Board of Directors and Chairman & Chief Executive Officer of Imprimerie nationale SA (IN Groupe)	Director and member of the CSR Committee of Française des Jeux (FDJ)

Name	Role	Other positions
LOCAL AUTHORITY REPRE	SENTATIVES FROM AREAS DIRECTLY AFFECT	TED BY THE COMPANY'S ACTIVITIES
Ms Lepetit Annick	Paris City Councillor	 Chairman of the development company Paris & Métropole Aménagement
Ms Luciani-Boyer Pascale	Local authority representative from Saint-Maur-des-Fossés CEO of SAS Château de la Tourlandry	 Director and Deputy Chairwoman of Medef-East Paris Chairwoman of the non-profit organisation Hackathon Memory
REPRESENTATIVES OF SOC	IO-ECONOMIC INTEREST GROUPS	
Ms Bellon Michèle	Former Chairwoman of ERDF Chairwoman of the RATP Audit Committee	 Director of HF Company Director of Athena Investments Director of Resolis, a non-profit organisation under the French law of 1901
Ms Joëssel Magali	Director of the investment fund Sociétés de Projets Industriels Member of the Mid & Large Cap division of Bpifrance	Member of the Board of Directors of Mersen, Yposkesi, Naval Energies
Ms Guillouard Catherine	Chairwoman and Chief Executive Officer of RATP	 Director of Engie (until the AGM of 17 May 2019) Director of Airbus S.E Member of the Supervisory Board of Systra Chairwoman of the Supervisory Board of RATP Dev Chairwoman of the Board of Directors of the RATP Foundation
REPRESENTATIVES OF PUE	BLIC TRANSPORT CUSTOMERS	
Mr Babut Michel	Representative of Fédération nationale des associations d'usagers des transports (FNAUT – national federation of users)	No terms of office
Mr Bernadelli Stéphane	Member of Union nationale des associations familiales (UNAF – national union of family non-profit organisation)	 Member of the Board of Directors of UNAF Director appointed by UNAF to the Conseil supérieur de l'éducation routière – (French road safety training council), to the SNCF Advisory Committee for consumers and users and to the Board of Caisse nationale d'assurance maladie
REPRESENTATIVES CHOSE	N FOR THEIR TRANSPORT BUSINESS EXPERT	rise
Mr Angles Bruno	Chairman of Crédit Suisse France and Belgium	Director of Fondation de France Chairman of Le Cercle Turgot
Mr Raulin Patrice	Former Chairman of Société Lyon-Turin Ferroviaire, Société française du tunnel routier du Fréjus, École nationale des travaux publics de l'État and the Supervisory Board of Société des aéroports de Lyon • Chairman of the CMTTT	 Member of the APRR Group's Procurement Board Deputy Chairman of Fédération Habitat-Humanisme, Joint Managing Director of Foncière d'Habitat-Humanisme Member of the Board of Directors of the non-profit organisations HH Gestion, Coallia and Coallia Solidaire, the social housing company Coallia Habitat, and the non-profit organisation Accession Solidaire (formerly Mouvement d'aide au logement).
EMPLOYEE REPRESENTATI	VES	
Ms Benbouzane Fatma	Rassemblement union member	Director of the RATP Foundation
Mr Bouzourene Mohamed	UNSA union member	Director of RATP Habitat
Ms De Wilde-Ghikh Laurence	UNSA union member	Director of the RATP Foundation
Mr El Hachemi Abdelmalek	Rassemblement union member	Director of RATP Connect
Ms Jeunet-Mancy Claire	CFE-CGC union member	Director of RATP Travel Retail
Mr Lamasse Arole	UNSA union member	Director of RATP Real Estate
Ms Pedraza Gaëlle	CGT union member	Member of the Board of Directors of RATP Habitat
Mr Roue Gilles	CGT union member	 Employee director of the RATP pension fund Director of RATP Real Estate
Mr Techer Hervé	SUD union member	Director of RATP Connect

Consolidated financial statements

Statutory Auditors' report on the consolidated financial statements

Consolidated statements of comprehensive income 101

Consolidated balance sheets 103

Consolidated statements of cash flows 104

Consolidated statements of changes in equity 105

Notes to the consolidated financial statements 106

Statutory Auditors' report on the consolidated financial statements

Financial year ended 31 December 2019

To the Board of Directors of RATP

Opinion

In the performance of the assignment entrusted to us by the Commissioner of State Holdings, we have audited the accompanying consolidated financial statements of the Régie autonome des transports parisiens (hereinafter "RATP") for the year ended 31 December 2019.

We certify that the consolidated financial statements give a true and fair view of the results of operations for the financial year, and of the assets and financial position of the company as at 31 December 2019 in accordance with the IFRS standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We consider that the elements we have collected are appropriate and sufficient for basing our opinion.

Our responsibilities under those standards are further described in the "Statutory Auditors' responsibilities for the audit of the consolidated financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us, for the period from 1 January 2019 to the date of our report and we specifically did not provide any prohibited non-audit services referred to in article 5-(1) of regulation (EU) No. 537/2014 or in the French code of ethics (Code de déontologie) for Statutory Auditors.

Observation

Without qualifying the opinion expressed above, we draw your attention to Notes 1.2 - "Development of IFRS standards and accounting changes" and 12 - "Leases" which set out the change in accounting method following the application of IFRS 16 "Leases" on 1 January 2019.

Justification of our assessments - Key audit matters

In accordance with the requirements of articles L. 823-9 and R. 823-7 of the French commercial code (Code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the financial year, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon. We express no opinion on items of these consolidated financial statements taken separately.

Measuring intangible assets and property, plant and equipment of the State-owned industrial and commercial public utility (EPIC)

Identified risk

As at 31 December 2019, intangible assets and property, plant and equipment amounted to €7.8 billion and represented approximately 48% of the Group's total assets. They are the EPIC's assets and are held by the EPIC's two CGUs: Transport operations (TO) and Infrastructure management (IM).

RATP's economic and management model is evolving in the context of negotiating the new contractual arrangement with Île-de-France Mobilités for the period 2021-2025, from the beginning of the Regulatory transport authority's (Autorité de régulation des transports - ART) control over IM from 2020 and opening of transport markets to competition from the beginning of the financial year.

Impairment tests are performed by management to ensure that the carrying amount of EPIC's assets is not greater than their recoverable value and does not present a risk of impairment. These impairment tests are carried out according to the methods set out in Note 15 of the notes to the consolidated financial statements, based on IM budgets and TO's fully-owned assets. These budgets notably include in assumptions of contract renewals leading to a financial performance identical to that of the current agreement. The margins for manoeuvre observed remain very sensitive to the economic assumptions and discount rates used. Any unfavourable change in expected profitability is likely to significantly affect recoverable value.

In addition, management justifies the absence of an impairment indicator for returnable and reversionary assets from the TO due to legal and contractual provisions.

We deemed the valuation of EPIC's assets to be a key audit matter because of their significant amounts in the Group's financial statements and the method of determining the recoverable value, which is based on management's judgement, particularly with regard to estimates of future cash flows or discount rates used.

Audit response

We assessed management's approach in the evolving economic, legal and regulatory context summarised above and the compliance of this approach with the accounting standards in force.

We assessed the company's models and calculations particularly by:

- comparing the discount rates used by the CGUs with our internal databases:
- assessing the quality of the process for drawing up and approving budgets and forecasts;
- comparing growth in revenue and investment over the term of the RATP-Île-de-France Mobilités agreement with the contractual conditions for the years 2019 and 2020;
- assessing the consistency of information and other assumptions used in these models with the budgets and forecasts made by management and presented to the Board of Directors and, on the other hand, with our knowledge of the sector and the specificities of the RATP-Île-de-France Mobilités contract acquired, in particular, during interviews with the members of the Executive Committee;
- verifying the justification and documentation of the market value of qualified returnable and reversionary assets;
- controlling the sensitivity analysis of the recoverable value carried out by the Group to the changes in the main assumptions considered.

We verified that the financial information given in the accompanying notes was appropriate.

Measurement of RATP Dev goodwill

Part of the business development outside Île-de-France was carried out through external growth resulting in the recognition of goodwill on RATP Développement's CGUs. Goodwill, which reflects the difference between the acquisition cost and the fair value of the assets acquired and liabilities assumed, is described in Note 8 to the consolidated financial statements.

It represented €357 million as at 31 December 2019.

Impairment tests are performed by management to ensure that the carrying amount of goodwill is not greater than recoverable value and does not present a risk of impairment.

The impairment testing methods used are described in Note 15 of the notes to the consolidated financial statements based on medium-term budgets. These budgets include in agreement renewal assumptions. The margins for manoeuvre observed remain very sensitive to the discount rates used. Any unfavourable change in expected profitability is likely to significantly affect recoverable value.

We deemed the valuation of RATP Développement's goodwill to be a key audit matter because of the significant amount in the Group's financial statements and the method of determining recoverable value, which is based on management's judgement, particularly with regard to estimates of future cash flows or discount rates used.

Audit response

We assessed that the accounting methods used by the Group complied with the accounting standards in force.

We also carried out a critical analysis of the arrangements for implementing these methods and in particular assessed:

- the reasonableness of the cash flow forecasts and growth rates used in relation to the economic and financial context;
- the reliability of the process for preparing estimates by examining the reasons for the differences between the forecasts in prior financial years and actual performance;
- the consistency of these cash flow forecasts with management's latest estimates, as presented to the Board of Directors as part of preparing the medium-term plan;
- the discount rate calculation applied to the cash flows estimated in relation to observable data;
- the relevance of the sensitivity analysis of the recoverable value carried out by the Group in the changes in the main assumptions considered.

We also assessed the appropriateness of the information presented in Notes 8 and 15 to the consolidated financial statements.

Recoverability of deferred tax assets

Identified risk

Deferred tax assets amounted to €542 million in the consolidated balance sheet.

As stated in Note 7.3 to the consolidated financial statements, deferred tax assets on temporary differences or loss carryforwards are recognised to the extent that it is probable that taxable profit will be available against which the temporary difference can be utilised, and that the recoverability of these deferred tax assets is assessed within a reasonable period of time taking into account expected changes to the tax rate.

We have identified this subject as a key audit matter considering management's assumption in this respect, including EPIC's capacity to achieve the targets defined in the business plan drawn up by the entity's management and approved by the Board of Directors.

Audit response

Our work consisted in assessing the likelihood that the EPIC RATP could, in the future, use the tax loss carryforwards generated to date, particularly with regard to:

- deferred tax liabilities existing in the same tax jurisdiction and which could be used before they expire to offset deferred tax liabilities in the same tax jurisdiction;
- the ability of the EPIC to realise future taxable profits making it possible to absorb prior tax losses.

We have verified that the methods used by management to identify existing tax loss carryforwards, either by deferred tax liabilities or by future taxable profits, were appropriate.

To assess future taxable profits, we analysed the reliability of the process used to establish future net income forecasts and the probability of the Group recovering its deferred tax assets by:

- comparing net income forecasts in prior financial years with the actual net income for the financial years in question;
- comparing future net income forecasts with the forecasts provided for in the Île-de-France Mobilités agreement;
- checking that the assumptions on the renewal of the Île-de-France Mobilités agreement are consistent with the assumptions used to test intangible assets and property, plant and equipment for
- carrying out a critical analysis of the fiscal assumptions used by management to establish net income forecasts beyond the business plan period.

We have also assessed the appropriateness of the information presented in Note 7.3 to the consolidated financial statements.

Specific verifications

We also performed, in accordance with the professional standards applicable in France, the specific verifications required by French laws and regulations, on information about the Group in the Board of Directors' management report.

We have no matters to report as to its fair presentation and consistency with the consolidated financial statements.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

The firms KPMG and Mazars were appointed as Statutory Auditors of RATP by the Commissioner of State Holdings on 26 March 2015.

As at 31 December 2019, the firms KPMG and Mazars were in fifth year of their uninterrupted engagement.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS standards as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting policy unless it is expected to liquidate the company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems and, where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The Board of Directors is responsible for preparing the consolidated financial statements.

Statutory Auditors' responsibilities for the audit of the consolidated financial statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in article L. 823-10-1 of the French Commercial Code (Code de commerce), our statutory audit does not include assurance on the viability of the company or the quality of management of the affairs of the company.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditor exercises professional judgement throughout the audit. And furthermore:

• identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks and obtains audit evidence considered to be sufficient and appropriate to provide a basis for its opinion. The risk of not detecting a material mis-

CONSOLIDATED FINANCIAL STATEMENTS Statutory Auditors' report on the consolidated financial statements

statement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control;

- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements;
- assesses the appropriateness of management's use of the going concern accounting policy and, based on the audit evidence obtained, whether a material uncertainty exists relating to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of its audit report. However, future events or conditions may cause the company to cease to continue as a going concern. If the Statutory Auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The Statutory Auditor is responsible for the running, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgement, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters. We describe these matters in this audit report.

We also provide the Audit Committee with the declaration provided for in article 6 of regulation (EU) No. 537-2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by articles L. 822-10 to L. 822-14 of the French commercial code (*Code de commerce*) and in the French code of ethics (*Code de déontologie*) for Statutory Auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence and the related safeguards.

The Statutory Auditors

Paris-la Défense, 10 March 2020

KPMG Audit Mazars

Department of KPMG SA

Stéphanie Millet Lionel Gotlib Erwan Candau
Partner Partner Partner

Consolidated statements of comprehensive income

The financial statements are presented in thousands of euros.

1 — Income statement

Notes	31/12/2019	31/12/2018
Revenue	5,704,082	5,562,861
Other income from ordinary activities	397,351	431,481
Income from ordinary activities	6,101,432	5,994,342
Purchases	(616,871)	(608,378)
Other external expenses	(936,996)	(931,943)
Tax, duties and other payables	(331,765)	(315,319)
Payroll costs 5	(3,366,171)	(3,272,752)
Other operating expenses	(16,133)	(19,704)
EBITDA	833,496	846,246
Depreciation/amortisation	(479,323)	(395,660)
Additions to and reversals of provisions	(25,301)	8,520
Gain/(losses) on disposal of assets	(7,783)	9,411
Gain/(loss) on other consolidation scope changes 2.3		(2,057)
Other operating income (expenses)	(8,606)	(1,316)
Income from equity-accounted entities 17	6,769	(13,871)
Operating income after share of net income from equity-accounted entities	319,253	451,273
Financial income	37,890	17,147
Financial expenses 6	(200,900)	(180,964)
Net financial expense	(163,010)	(163,817)
Income from ordinary activities before taxes	156,243	287,456
Income tax	(5,864)	(80,332)
Net income from continuing operations	150,379	207,123
Net income (loss) from operations sold, discontinued or held for sale 2.3	(11,801)	
Consolidated net income	138,578	207,123
Attributable to owners of the company	130,852	199,851
Non-controlling interests	7,726	7,272

2 — Other comprehensive income

	31/12/2019	31/12/2018
Consolidated net income	138,578	207,123
Change in the fair value of cash flow hedges	(15,312)	(6,516)
Deferred taxes on changes in the fair value of the effective portion of the cash flow hedge derivative instruments	362	(362)
Foreign currency translation differences	3,262	586
Share from equity-accounted entities of comprehensive income that may be reclassified to profit or loss	672	(895)
Total other comprehensive income that may be reclassified to profit or loss	(11,016)	(7,187)
Remeasurement of gross defined benefit obligations	(135,724)	19,997
Deferred taxes on remeasurement of defined benefit obligations	1,229	(301)
Share from equity-accounted entities of comprehensive income that may not be reclassified to profit or loss	254	588
Total other comprehensive income that may not be reclassified to profit or loss	(134,241)	20,284
Income and expense recognised under other components of comprehensive income	(145,257)	13,097
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	(6,679)	220,220
Attributable to owners of the company	(15,226)	212,133
Non-controlling interests	8,547	8,087

Consolidated balance sheets

Assets	Notes	31/12/2019	31/12/2018	Equity and liabilities Note		31/12/2019	31/12/2018
				Capital endowment		433,367	433,367
				Reserve for fixed assets made available		250,700	250,700
Net goodwill	8	356,848	348,045	Reserves		4,020,522	3,973,421
Intangible assets	9	988,274	845,964	Income for the period		130,852	199,851
Property, plant and equipment	10	6,843,612	6,247,204	Equity attributable to owners of the company		4,835,441	4,857,339
Equity-accounted investments	17	144,975	107,633	Non-controlling interests		32,948	31,743
Non-consolidated securities	18	52,027	48,437	Equity		4,868,388	4,889,082
Derivative financial instruments - non-current	30	123	14,072				
Financial concession assets – non-current	14	3,548,568	3,685,761	Employee benefits	24	875,080	734,848
Other non-current financial assets	19	143,958	139,971	Other provisions – non-current	25	167,992	154,947
Deferred tax assets	7	727,987	716,133	Loans and borrowings - non-current	26	5,282,396	4,745,123
Non-current assets		12,806,371	12,153,220	Lease liabilities – non-current	12	326,001	
				Derivative financial instruments – non-current	30	38,425	42,817
				Deferred tax liabilities	7	186,058	185,750
Inventories and work in progress	20	250,327	238,074	Other trade creditors		17,406	14,015
Operating receivables	21	1,393,055	1,164,978	Non-current liabilities		6,893,358	5,877,501
Derivative financial instruments – current	30	3,324	107,619				
Financial concession assets – current	14	287,612	294,243	Other provisions – current	25	82,681	65,880
Other financial assets – current	19	148,653	132,070	Loans and borrowings – current	26	1,730,544	1,917,964
Cash and cash equivalents	22	1,544,037	1,075,498	Lease liabilities – current	12	72,886	
Current assets		3,627,009	3,012,483	Derivative financial instruments – current	30	6,992	4,123
				Accounts payable	27	2,777,671	2,411,153
				Current liabilities		4,670,774	4,399,120
Assets held for sale		1,704		Liabilities related to assets held for sale		2,563	
TOTAL ASSETS		16,435,084	15,165,702	TOTAL EQUITY AND LIABILITIES		16,435,084	15,165,702

Consolidated statements of cash flows

	31/12/2019	31/12/2018
Net income (continuing operations)	150,379	207,123
Income from equity-accounted entities	(6,679)	13,871
Depreciation, amortization and provisions	531,679	400,014
Depreciation and amortization of concession assets	334,607	330,149
Gains/(losses) from asset disposals	7,783	(5,901)
Other non-cash items	4,418	3,874
Deferred taxes	(9,815)	67,751
Current tax	15,679	12,581
Current tax paid	(11,344)	(7,327)
Increase/(decrease) in accrued interest	(2,521)	(15,086)
Cash flow from operations after interest and current tax paid	1,014,186	1,007,049
Change in working capital (excluding investments and grants)	87,103	(231,853)
Net cash provided by operating activities	1,101,289	775,196
Purchase of tangible and intangible assets	(1,627,172)	(1,430,465)
Purchase of concession assets	(209,748)	(224,845)
Change in working capital relating to investments and concession assets	570	130,910
Investment grants excluding concession assets	684,766	564,660
Investment grants for concession assets	82,380	120,606
Change in investment grants to be received	24,882	121,124
Proceeds from disposals of property, plant and equipment and intangible assets	28,963	20,521
Purchase of financial assets	(36,993)	(10,261)
Change in loans and advances granted	(5,959)	2,254
Proceeds from financial assets		68
Dividends received from equity-accounted entities	(58)	885
Effect of scope changes	(1,951)	(5,106)
Other cash flows from investing activities	(1,060,319)	(709,650)
Non-controlling interests – share of changes in capital	18	292
Issuance of borrowings	605,113	261,799
Repayment of borrowings	(344,805)	(721,619)
Net payment of rental debt	(45,570)	
Change in commercial paper	268,026	95,926
Change in cash collateral and short-term investments	(60,391)	280,247
Dividends paid to non-controlling interests	(6,982)	(6,792)
Other cash flow from financing activities	(13,602)	26
Net cash from financing activities	401,809	(90,121)
Net cash from continuing operations	442,779	(24,575)
Effect of changes in the exchange rate	690	1,405
Change in cash from operations sold, discontinued and held for sale	(2,983)	
Net change in cash and cash equivalents	440,486	(23,170)
Cash and cash equivalents at 1 January	1,000,845	1,024,015
Cash and cash equivalents at 31 December (Note 3.14)	1,441,331	1,000,845
Change in cash and cash equivalents	440,486	(23,170)

Consolidated statements of changes in equity

	Capital endowment	Reserve for assets allocated to RATP	Translation allocated reserve	gains and	Change in non- recyclable fair value	Cash flow hedges	Other reserves		Non- controlling interests	Total equity
EQUITY AS AT 31 DECEMBER 2017	433,367	250,700	(7,229)	(148,058)	(224)	(31,994)	4,151,873	4,648,434	31,321	4,679,755
Net income for the period							199,851	199,851	7,272	207,123
Other comprehensive income			(1,171)	20,368		(6,916)		12,281	815	13,097
Total comprehensive income for the period			(1,171)	20,368		(6,916)	199,851	212,133	8,087	220,220
Other transactions with owners of the company							(3,909)	(3,909)	(859)	(4,767)
Dividends									(6,790)	(6,790)
Other changes							681	681	(17)	666
EQUITY AS AT 31 DECEMBER 2018	433,367	250,700	(8,400)	(127,690)	(224)	(38,910)	4,348,496	4,857,339	31,743	4,889,082
Net income for the period							130,852	130,852	7,726	138,578
Other comprehensive income			3,099	(134,299)		(14,879)		(146,078)	821	(145,258)
Total comprehensive income for the period			3,099	(134,299)		(14,879)	130,852	(15,226)	8,547	(6,679)
Other transactions with owners of the company							(1,484)	(1,484)	(801)	(2,286)
Dividends									(6,564)	(6,564)
Other changes							(5,186)	(5,186)	23	(5,163)
EQUITY AS AT 31 DECEMBER 2019	433,367	250,700	(5,300)	(261,989)	(224)	(53,789)	4,472,678	4,835,441	32,948	4,868,388

Notes to the consolidated financial statements

Year ended 31 December 2019

RATP Group is a major public transport provider, operating in towns and suburbs in France and across the world.

The parent company, 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 with the Paris Trade and Companies Register. Its head office is located at 54, quai de la Rapée, 75012 Paris.

The aim of RATP is primarily to run public transport services in Îlede-France. Its purpose, set out by French law No. 2009-1503 dated 8 December 2009 on public passenger services by rail (ORTF law), is also to manage the network infrastructure for public passenger transport services.

The law of 24 December 2019 on Mobility (loi d'orientation des mobilités – LOM) established regulation of RATP Infrastructure management activities and safety by the Transport Regulatory Authority (Autorité de régulation des transports – ART).

The transport services in Île-de-France are defined as Île-de-France Mobilités. RATP's activity as operator is governed by multi-year agreements with Île-de-France Mobilités. Under these agreements, RATP undertakes to provide a transport service defined in terms of quantity and quality and receives compensation based on direct revenues and flat-rate contributions paid by Île-de-France Mobilités.

RATP also operates public transport networks via its subsidiaries throughout France and abroad.

RATP is owned by the French State, and RATP Group's consolidated financial statements are included in RATP's combined financial statements.

The Group's consolidated financial statements at 31 December 2019 were approved by the Board of Directors on 6 March 2020.

Unless otherwise stated, all amounts are presented in thousands of euros.

1 — Accounting guidelines

1.1 Accounting principles and policies

Pursuant to European regulation 1606/2002 of 19 July 2002 on international standards, RATP Group's consolidated financial statements have been prepared at 31 December 2019 in accordance with IFRS standards as published by the International accounting standards board (IASB) and adopted by the European Union.

Information on these standards is available on the European Commission website at: ec.europa.eu/finance/company-reporting/ifrs-financial-statements/index en.htm.

1.2 Development of IFRS standards and accounting changes

Standards, amendments and interpretations mandatory for financial years beginning on or after 1 January 2019

IFRS 16

Principles

IFRS 16 "Leases" came into force on 1 January 2019, replacing IAS 17 "Leases", as well as IFRIC 4 interpretations "Determining whether an agreement contains a lease", SIC 15 "Advantages in operating leases" and SIC 27 "Assessment of the substance of transactions in the legal form of a lease".

The standard provides for the recognition of leases on the lessees' balance sheet by recognising a right-of-use asset (the right of use of the leased asset during the term of the contract) and a lease liability (a lease obligation measured at the present value of future lease payments).

For each lease, the discount rate used to calculate the lease liability is determined according to the incremental borrowing rate on the lease commencement date (i.e. on the date the asset is made available by the lessor), since the implicit interest rate of the contract cannot be easily determined. The incremental borrowing rate corresponds to the rate that the entity would have to pay to borrow, over a period of time and with a payment profile similar guarantee, the funds necessary to obtain a property of similar value to the assets under the right of use, in a similar economic environment.

The lease term corresponds to the non-cancellable period of the lease, unless the Group is reasonably certain to exercise the renewal options provided for in the contract.

The Group has applied certain practical expedients as part of its application of IFRS 16. In particular: no right-of-use assets or lease liabilities are recognised for leases with a lease term of twelve months or less; no right-of-use assets or lease liabilities are recorded for low-value assets (less than US 5,000 dollars).

Transition

The Group opted for the "simplified retrospective" method of accounting for its leases in accordance with IFRS 16 on the transition date (1 January 2019), without restating the comparative information presented: the 2018 financial statements are presented in accordance with IAS 17.

The first application of this text did not have an impact on consolidated equity at 1 January 2019, as the Group chose to recognise right-of-use assets corresponding to the amount of lease liabilities.

The discount rate used to calculate the lease liability for each lease as of 1 January 2019 was the incremental borrowing rate for the residual term of the lease, by entity or by country.

Finance leases under IAS 17 have not been reassessed and were deemed to fall within the scope of IFRS 16. At 1 January 2019, they were recognised under IFRS 16, on the basis of the net book values of the assets and liabilities recognised under IAS 17 on the balance sheet at 31 December 2018.

The impact of the first-time application of IFRS 16 on total balance sheet assets at 1 January 2019 was €238 million. Balance sheet fixed assets and financial liabilities increased by this amount.

The weighted average incremental borrowing rate applied to lease liabilities recognised in the balance sheet at 1 January 2019 was 1.47%

Overview of the financial statements

Right-of-use assets are recognised under property, plant and equipment on the balance sheet. They are recognised as a separate line item to the underlying assets and are not identified in the consolidated balance sheet. The details by type of fixed assets are provided in Note 12.

Lease liabilities are identified in the consolidated balance sheet (under the line items current and non-current "financial liabilities – leases). They are not included in financial debt.

In the income statement, lease expense, which was recognised for operating leases under IAS 17, is replaced by an amortisation expense for the right-of-use asset (recognised in operating income) and by an interest expense (recognised in the financial expense). In addition, the recognition of leases under IFRS 16 results in the recognition of deferred taxes.

In the cash flow statement, interest expense impacts cash flows from operating activities and lease payments impacts financing flows.

Financial impact

The main impacts of IFRS 16 application in 2019 are presented in Note 12.

IFRIC 23

IFRIC 23 is an interpretation of IAS 12 "Income taxes" according to which, when faced with tax uncertainty regarding taxable profit, tax bases, tax loss carryforwards, unused tax credits and tax rates, the entity must determine whether the tax administration is likely to accept the treatment it has chosen. Thus, the entity must now take tax uncertainty into account in the recognition and measurement of its current (or deferred) tax. Pursuant to the decision made by the IFRS interpretation committee (IFRS IC) in September 2019, this uncertainty is presented in current (or deferred) tax liabilities (and, where applicable, assets).

The implementation of the IFRIC 23 interpretation has no impact on the financial statements at 31 December 2019.

Standards, amendments and interpretations mandatory for financial years beginning after 1 January 2019 and anticipated by the Group

The Group has chosen to apply the amendment to IFRS 9, IAS 39 and IFRS 7 published by the IASB in September 2019 as part of the reform of the benchmark interest rates early from 2019.

This amendment allows the Group to ignore uncertainties about the future of benchmark rates when assessing the effectiveness of hedge relationships and/or the highly probable nature of the risk covered, thereby making it possible to secure existing or future hedge relationships until the removal of these uncertainties.

Interest rate derivatives documented to hedge debts indexed to a benchmark rate are presented in Note 30. The Group is currently analysing the impacts linked to future amendments to benchmark indices.

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 2019.

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 service concession agreements (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 Sub-totals of the income statement

RATP Group has chosen to present its consolidated income statement 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

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 the allocations to personnel-related provisions, in particular those relating to personnel commitments, appear on the line "personnel costs" (with the exception of charges for discounting long-term and post-employment benefits and calculated actuarial differences on long-term benefits that are part of the financial income).

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 and movements in provisions) and other operating income and expenses, 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 Financial income

Under financial income, the Group presents the consequences of its financing transactions, which principally reflect the cost of its net

debt. The financial income includes the interest paid on the Group's financial liabilities and on the IFRS 16 lease liabilities, the interest received on available cash, income from leasehold transactions as well as the effects of discounting long-term and post-employment benefits

These items are shown net of hedging transactions, including changes in the fair value of derivative financial instruments that do not meet IFRS 9 hedge accounting criteria.

1.4.4 Consolidated cash flow statement

The presentation of the Group's cash flow statement evolved as follows as at 31 December 2019, for better comparability:

- only tax income and expense that generate cash flows during the period now impact cash flow from operations (capacité d'autofinancement – CAF).
- CAF is thus neutralised from the impact of deferred tax income or expense as well as the change in current tax liabilities. This change does not impact the aggregate of "Net cash from operating activities" compared with 31 December 2018:
- only the portion of the financial interest paid for the period is now presented in the CAF (after financial interest);
- the neutralisation of accrued interest not yet due is no longer included in the net cash from financing activities.

The table below presents the impact of these changes on the 2018 cash flow statement.

	31/12/2018 reported	31/12/18 pro forma	Change pro forma - reported
Cash flow from operations – reported	949,130		
Adjustment of deferred tax expense (income)		67,751	67,751
Adjustment of tax expense (income)		12,581	12,581
Tax paid		(7,327)	(7,327)
Increase/(Decrease) in accrued interest		(15,086)	(15,086)
Cash flow from operations – pro forma		1,007,049	
Adjustment of deferred tax expense (income)	67,751		(67,751)
Adjustment of tax expense (income)	12,581		(12,581)
Tax paid	(7,327)		7,327
Change in operating working capital requirement	(231,853)	(231,853)	
Net cash provided by operating activities	790,282	775,196	(15,086)
Increase/(Decrease) in accrued interest	(15,086)		15,086
Net cash from financing activities	(105,207)	(90,121)	15,086

1.5 Ownership regime covering 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 belong to Île-de-France Mobilités. Île-de-France Mobilités 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 agreements" (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, Îlede-France Mobilités has a right of repossession on these assets.
 These assets are recognised as financial assets and intangible assets
 in accordance with IFRIC 12 "Service concession agreements"
 (Note 14);
- 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 as follows:

	Infrastructure management (IM)		Transport operation			
Type of assets	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: • bus depots; • equipment, etc.	Assets allocated for administrative, social and training purposes.		
Ownership regime	RATP owns these assets.	These assets belong to Île-de-France Mobilités RATP uses and manages the assets. Île-de-France Mobilités will take possession of the assets once the operating rights expire.	RATP owns these assets. Île-de-France Mobilités 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 out the arrangements for the compensation payable by Île-de-France Mobilités to RATP for the assets.	The compensation principles and arrangements apply for the duration of the Île-de-France Mobilités 2016-2020 agreement.			
Compensation arrangements upon expiry of operating rights	Not applicable.	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 Île-de-France Mobilités-RATP agreement provides for either the reversion of the assets at a value of zero for assets transferred to RATP, or at their carrying amount, net of grants, for other assets.	Not applicable.		
Assets eligible under IFRIC 12 "Service concession agreements"	No	Yes ⁽¹⁾	Yes ⁽¹⁾	No		

⁽¹⁾ Assets eligible under IFRIC 12 are 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 include 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 noncontrolling 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 RATP Habitat

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 regulatory 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 RATP Habitat;
- although RATP exercises influence over certain aspects of RATP Habitat's management, its influence cannot be qualified as control. RATP cannot manage the relevant activities of RATP Habitat despite its majority share. The assets of RATP Habitat 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 revenues (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 equity investments in RATP Habitat are classified in the balance sheet under "Non-consolidated securities". Considering the regulations that would be applicable in the event of disposal of these securities, the cost of acquisition reflects the fair value of the equity investment.

The main financial information concerning the low-cost housing company HLM RATP Habitat 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 be 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 in the period in which the costs are incurred or the service received.

2.1.1.3 Commitments to purchase non-controlling interests

Financial liabilities include the puts 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 methods

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 Conversion of 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, for simplification.

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, foreign currency-denominated monetary assets and liabilities 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 39.

2.3 Impact of transactions on the scope of consolidation

	31/12/2019	31/12/2018
Gain/(loss) on other		
consolidation scope changes		(2,057)

Transactions on the 2018 scope did not fall under IFRS 5. In 2019, disposals fell under IFRS 5.

IFRS 5

Net income from sold, abandoned and intended-to-be-sold activities can be broken down as follows:

	31/12/2019
Operating income	(11,319)
Net financial expense	(499)
Taxes	17
NET INCOME	(11,801)

Net cash flow from sold, abandoned and intended-to-be-sold activities can be broken down as follows:

	31/12/2019
Net cash provided by operating activities	3,869
Net cash from investing activities	(1,820)
Net cash from financing activities	(4,884)
Other flows with no impact on cash flows	(148)
NET CHANGE IN CASH AND CASH EQUIVALENTS	(2,983)

3 — Revenue recognition

Revenue is recognised when the major goods and services 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.

Pursuant to the application of IFRS 15, financial consideration for receivable IFRIC 12 "Financial concession assets" is recognised as "Other income from ordinary activities". In addition to certain sub-contracting agreements, the analysis led to considering the entity as the main intermediary and no longer as an agent, leading to the recognition of the amount of income from these operations under revenue, on the one hand and the amount of expenses from these activities, on the other.

3.1 RATP's revenue

3.1.1 Revenue from transport activities

It comprises:

- direct traffic revenues from transport users;
- Île-de-France Mobilités contributions:
 - "C1", a contribution to operating expenses intended to cover public service obligations. This contribution comprises three parts: a flat-rate contribution "C11" covering operating expenses that are not covered by revenues from transport users; a contribution "C12" covering the exact amount of business, professional and property-related taxes and duties levied; and a contribution "C13" covering the difference between the indexing of the forecast direct revenues based on the methods used to calculate the "C11" flat-rate contribution and the direct estimated revenues based on Île-de-France Mobilités' pricing decisions.
- "C2", a contribution to finance investments, for the portion excluding returnable assets and reversals. The portion relating to returnable and reversionary (concession) assets is accounted for (as part of the IFRIC 12 interpretation – see Note 14) as the payment of the financial asset of concession by Île-de-France Mobilités on the one hand and the remuneration of the financial concession assets recognised as "other income from ordinary activities" on the other,
- a reward or penalty for quality of service,
- a profit-sharing scheme with risks and gains shared between RATP and Île-de-France Mobilités based on the actual direct revenues generated compared with contractual revenue targets.

This transport revenue is provided for under the terms of the 2016-2020 multi-annual agreement concluded between Île-de-France Mobilités and RATP. The "C11" and "C2" contributions are revalued every year by applying an indexation formula based on the indexes, pursuant to the contractual provisions.

Regarding direct traffic revenues, public prices are set by Îlede-France Mobilités, the organising authority. They constitute a public service obligation with which RATP must comply.

3.1.2 Other revenue

It mainly includes:

- revenues from advertising and commercial leases;
- various repayments (including training costs).

3.1.3 Non-transport revenues

Non-transport revenues consist primarily of revenues 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 expenses 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 revenues from transport users;
- pricing contributions made by the transport authorities.

3.3 Income from ordinary activities

	31/12/2019	31/12/2018
Transport revenue	4,868,512	4,803,437
Transport-related activities	165,404	164,645
Non-transport revenue	670,166	594,778
Revenue	5,704,082	5,562,861
Proceeds from disposal of concession assets	196,491	201,282
Revenue from financial concession assets	110,496	114,275
Other	90,364	115,924
Other income from ordinary activities	397,351	431,481
INCOME FROM ORDINARY ACTIVITIES	6,101,432	5,994,342

In January 2020, RATP set up a December 2019 subscription refund proposal for Île-de-France passengers. The passengers must make a request for refund. In the financial statements of 31 December 2019, an amount of €103 million, corresponding to the best estimate of these requests, was recognised as a decrease in revenue.

Breakdown of revenue between France and abroad

31/12/2019			31/12/2018		
Total revenue	Revenue from France	Revenue from outside France		Revenue from France	Revenue from outside France
5,704,082	4,885,203	818,879	5,562,861	4,827,068	735,792

4 — Tax, duties and other payables

	31/12/2019	31/12/2018
Tax, duties and other payables	(331,765)	(315,319)

This item includes €153 million in taxes and duties on compensation and €98 million for the regional levy paid by RATP.

Taking into account the intrinsic characteristics of the French value-added business tax (CVAE), especially the cap mechanism, the Group recognises this expense in operating income.

5 — Payroll costs

5.1 Financial impact

	31/12/2019	31/12/2018
Compensation	(2,334,567)	(2,283,240)
Payroll-related costs	(940,219)	(969,098)
Long-term employee benefits	(687)	3,409
Post-employment benefits	(38,512)	(37,909)
Employee profit-sharing	(52,186)	(53,812)
French competitiveness and employment tax credit (CICE)		67,898
TOTAL PAYROLL AND PAYROLL-RELATED COSTS	(3,366,171)	(3,272,752)

5.2 Number of Group employees

	31/12/2019	31/12/2018
RATP EPIC	44,635	44,370
RATP Dev	19,008	18,082
Other subsidiaries	311	289
AVERAGE NUMBER OF EMPLOYEES	63,954	62,741

These are the employees of fully-consolidated companies. The employees of equity-accounted entities are not taken into account.

5.3 Defined employee benefit contribution plans

The funding mechanism of RATP's pension fund is based on the application of the following decrees:

- French decree No. 2005-1635 of 26 December 2005 regarding the RATP pension fund (CRP-RATP);
- French 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 French decree No. 59-157 of 7 January 1959 on passenger transport services in the Île-de-France region;
- French decree No. 2005-1637 of 26 December 2005 regarding RATP pension fund resources;
- French decree No. 2005-1638 of 26 December 2005 regarding the RATP pension fund.

These texts make CRP-RATP, state body, debtor of the pension fund. 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 – CNAVTS, and the complementary pension fund for managers/employees Agirc-Arrco). The European Commission authorised this funding mechanism on 13 July 2009 by a decision addressed to the French authorities.

RATP pays employer contributions into the CRP-RATP employees' pension fund. These contributions are in full discharge of its liabilities. RATP has no other actuarial liabilities. The payments made by RATP are expensed in the period they relate to.

6 — Financial income and expense

	31/12/2019	31/12/2018
Finance costs		
Interest cost on borrowings	(149,720)	(156,373)
Net foreign exchange gain (loss) on financing activities	270	(106)
Impact of accrued interest on hedges	(7,082)	4,089
Mark-to-market effect on non-hedging derivatives	(57)	7
Total finance costs	(156,589)	(152,382)
Income from cash and cash equivalents	149	880
TOTAL NET FINANCE COSTS	(156,440)	(151,502)
Other financial income and expense		
Income from investments	752	978
Income from leaseholds	475	388
Net foreign exchange gain (loss) on operating items	3,379	4,777
Accretion expense of employee benefits / Actuarial gains and losses on long-term post-employment benefits	(15,558)	(10,241)
Financial interest on rent	(6,050)	
Other financial income or expense	10,432	(8,217)
TOTAL OTHER FINANCIAL INCOME AND EXPENSE	(6,570)	(12,315)
NET FINANCIAL EXPENSE	(163,010)	(163,817)

Financial risk management is further described in Note 29.

7 — Income tax

7.1 Taxes payable

The tax payable includes the estimated amount of tax due (or receivable) in respect of taxable profit (or loss) for a financial year and any adjustment to the amount of tax payable in respect of previous periods. The amount of tax due (or receivable) is determined on the basis of the best estimate of the amount of tax that the Group expects to pay (or receive). It is calculated on the basis of the tax rates adopted on the reporting date.

Income taxes include current tax expense or income and deferred tax expense or income.

Tax consolidation

In 2016, RATP chose to fiscally consolidate the French subsidiaries in which it had a stake exceeding 95%, as stipulated in article 223-A of the French general tax code (*Code général des impôts*). Most of the French subsidiaries are in the company's tax consolidation scope.

7.2 Income tax expense

	31/12/2019	31/12/2018
Current tax expense/income	(15,679)	(12,581)
Deferred tax expense/income	9,815	(67,751)
TOTAL TAX	(5,864)	(80,332)

7.3 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 carryforwards 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 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 used was 33.33%.

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 1 January 2019	4,254,508	(3,538,375)	716,133	(185,750)	530,383
Tax recognised in the income statement	(36,099)	49,035	12,935	(3,120)	9,815
Tax recognised directly under other comprehensive income	45,613	(44,714)	899	465	1,364
Change in scope	(1,513)		(1,513)	1,626	114
Foreign currency translation differences	1,220	(481)	740	(604)	135
Other	(1,971)	763	(1,208)	1,324	117
AS AT 31 DECEMBER 2019	4,261,759	(3,533,772)	727,987	(186,058)	541,928

Deferred tax by nature is as follows:

	31/12/2019	31/12/2018
Deferred tax assets – income	634,890	669,373
Deferred tax assets – reserves	93,097	46,760
Total deferred tax assets	727,987	716,133
Deferred tax liabilities – income	184,554	183,850
Deferred tax liabilities – reserves	1,505	1,900
Total deferred tax liabilities	186,058	185,750
NET DEFERRED TAXES	541,928	530,383
Of which:		
temporary accounting/tax differences	3,516,667	3,642,646
• revaluation surplus	(4,625)	(6,220)
• leases	828	(855)
employee benefits	236,648	188,192
hedging instruments	15,153	12,186
regulated provisions	(69,499)	(56,734)
• tax loss carry forwards	7,591	7,466
• impairment on deferred tax assets	(3,162,983)	(3,255,109)
• other	2,147	(1,188)

Temporary differences result mainly from the differences between:

- the carrying amounts of fixed assets and their taxable values;
- the tax depreciation periods and the accounting depreciation periods;
- the differences in the tax and accounting treatment of grant reversals.

These temporary differences generate deferred tax assets (DTA) for RATP over several decades.

At 1 January 2016, in accordance with IAS 12, RATP Group assessed the recoverability of the deferred tax assets over a reasonable period

of time, taking into account expected changes in the tax rate. A €537 million deferred tax asset was recognised for RATP with an equity offsetting entry.

At 31 December 2019, RATP's deferred tax asset was re-measured through profit and loss taking into account:

- expected future income of +€85 million;
- an -€83 million reversal reflecting use in the year.

The net deferred tax asset amounted to €525 million at 31 December 2019.

7.4 Tax proof

	31/12/2019	31/12/2018
Net income	138,578	207,123
(–) Equity-accounted entities	6,769	(13,871)
(-) Net income from operations sold, discontinued or held for sale	(11,801)	
(–) Income tax	(5,864)	(80,332)
Income from ordinary activities before tax of consolidated companies	149,474	301,327
Statutory tax rate in France	33.3%	34.4%
Theoretical tax expense	(49,820)	(103,747)
Effect of tax rates in foreign jurisdictions	1,986	9,462
Other permanent differences	(12,132)	(2,732)
Effect of tax rate differences	(785)	(941)
Effect of tax consolidation	11,548	10,095
Other current tax items	727	(203)
Recognition of tax effect of previously unrecognised tax losses and deferred taxes	135,407	1,461
Current-year losses for which no deferred tax asset is recognised	(92,795)	6,273
Total tax expense	(5,864)	(80,332)
Effective tax rate	3.92%	26.66%

8 — Goodwill

Goodwill is initially recognised in the 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:

	31/12/2017	Change in scope	Effects of exchange	Impairment	Other	31/12/2018
France	87,111	(401)				86,710
Great Britain	90,465		(738)			89,726
Sightseeing	149,318		(400)			148,918
Other	20,042	2,633	877		(862)	22,690
TOTAL	346,936	2,232	(262)		(862)	348,045

	31/12/2018	Change in scope	Effects of exchange	Impairment	Other	31/12/2019
France	86,710					86,710
Great Britain	89,726		4,612			94,338
Sightseeing	148,918		2,501			151,419
Other	22,690	1,080	610			24,380
TOTAL	348,045	1,080	7,723			356,848

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 mainly comprises the intangible concession assets recognised as RATP's reversionary assets, 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 are amortised over ten years.

	31/12/2017	Acquisitions	Retirements and disposals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2018
Gross value							
Lease rights	2,626					(381)	2,245
Research and development costs	578						578
Concessions, patents and similar rights	600,500	2,545	(30,427)	83,841	63	822	657,343
Goodwill	2,376				6		2,382
Other plant, property and equipment	52,882	1,162	(2)	262	(172)		54,132
Intangible concession assets	391,092					61,700	452,792
Intangible assets in progress	175,029	117,713	(427)	(73,240)	1		219,077
Total gross value	1,225,082	121,420	(30,856)	10,863	(102)	62,141	1,388,548

	31/12/2017	Depreciation/ amortisation	Retirements, disposals and reversals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2018
Accumulated depreciation and impairment							
Lease rights	(1,533)	(35)				381	(1,187)
Research and development costs	(497)	(7,841)				7,780	(558)
Concessions, patents and similar rights	(446,831)	(60,531)	30,306	4	(31)	(32)	(477,115)
Goodwill	(908)	(29)			(2)		(939)
Other plant, property and equipment	(35,339)	(5,167)	738	(731)	149		(40,351)
Intangible concession assets	(19,112)					(3,323)	(22,435)
Total accumulated amortisation and impairment	(504,220)	(73,603)	31,044	(727)	116	4,806	(542,584)
NET VALUE	720,863	47,817	188	10,136	14	66,947	845,964

The impact of RATP's concession assets is explained in Note 14.

	31/12/2018	Acquisitions	Retirements and disposals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2019
Gross value							
Lease rights	2,245						2,245
Research and development costs	578			1,946		(1,946)	578
Concessions, patents and similar rights	657,343	3,299	(11,819)	67,920	56	(37,868)	678,931
Goodwill	2,382			(140)	10		2,252
Other plant, property and equipment	54,132	5,052	(2,791)	2,215	(3,192)		55,416
Intangible concession assets	452,792					116,267	569,059
Intangible assets in progress	219,077	104,710		(62,693)	2		261,095
Total gross value	1,388,548	113,061	(14,610)	9,248	(3,125)	76,453	1,569,575

	31/12/2018		Retirements, disposals and reversals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2019
Accumulated depreciation and impairment							
Lease rights	(1,187)	(35)					(1,222)
Research and development costs	(558)	(8,151)				8,131	(578)
Concessions, patents and similar rights	(477,115)	(62,686)	11,167	10	(21)	31,019	(497,626)
Goodwill	(939)	(64)	(529)	141	(14)		(1,405)
Other plant, property and equipment	(40,351)	(5,642)	6,482	24	(555)		(40,042)
Intangible concession assets	(22,435)					(17,993)	(40,428)
Total accumulated amortisation and impairment	(542,584)	(76,579)	17,120	175	(591)	21,157	(581,301)
NET VALUE	845,964	36,483	2,510	9,423	(3,716)	97,610	988,274

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 under property, plant and equipment. 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 Île-de-France Mobilités (Note 3.1), the C2 contribution covers the costs of borrowing to finance investments, in addition to amortisation. 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	35 to 140 years
Railway infrastructure component asset	Straight-line	15 to 40 years
Building shell and brickwork	Straight-line	70 to 100 years
Building fixtures and fittings	Straight-line	6 to 30 years
Tracks	Straight-line	10 to 50 years
Automated train operating system (SAET) and track signalling	Straight-line	5 to 40 years
Rolling stock (rail)	Straight-line	20 to 40 years
Road rolling stock	Straight-line	4 to 10 years
Plant equipment, fixtures and fittings	Straight-line	5 to 100 years
Other plant, property and equipment	Straight-line	2 to 15 years

The useful lives of property, plant and equipment are reviewed annually if there are significant changes.

	31/12/2017	Acquisitions	Retirements and disposals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2018
Gross value							
Land	577,789	1	(2,694)	1,411	(78)	(12)	576,417
Investment property	1,077						1,077
Buildings	9,272,372	4,350	(21,604)	380,866	1,060	(38,450)	9,598,594
Technical plant, equipment and industrial tooling	4,464,933	10,799	(17,623)	295,055	1,205	(57,828)	4,696,541
Transport equipment	2,270,400	34,489	(70,046)	193,653	7,809	(126,872)	2,309,433
Other plant, property and equipment	209,581	3,880	(4,098)	29,488	5,020	(5,201)	238,670
Property, plant and equipment in progress	2,965,737	1,483,050	(252)	(911,904)	(54)	(24,914)	3,511,664
Investment grants	(9,634,964)	(684,130)	4,610			(2,159)	(10,316,643)
Total gross value	10,126,925	852,440	(111,707)	(11,431)	14,963	(255,436)	10,615,754

	31/12/2017	Depreciation allowance	Retirements, disposals and reversals	Reclassification	Changes in scope, foreign currency translation differences	Impact of concession assets	31/12/2018
Accumulated depreciation and impairment							
Land	151	(3,304)	5,376			597	2,820
Investment property	(817)						(817)
Buildings	(3,632,979)	(263,695)	18,240	1,680	(570)	30,899	(3,846,425)
Technical plant, equipment and industrial tooling	(2,754,139)	(236,485)	14,483	(224)	(714)	34,849	(2,942,230)
Transport equipment	(648,104)	(385,026)	66,886	(2,269)	(5,730)	219,545	(754,698)
Other plant, property and equipment	(160,468)	(15,184)	3,309	106	(2,044)	2,435	(171,846)
Property, plant and equipment in progress							
Investment grants	3,097,268	(4,991)	247,542			4,826	3,344,645
Total accumulated depreciation and impairment	(4,099,088)	(908,685)	355,837	(708)	(9,057)	293,151	(4,368,550)
NET VALUE	6,027,837	(56,245)	244,130	(12,138)	5,906	37,715	6,247,204

	31/12/2018	Acquisitions	IFRS 16 initial application on 1 January	Retirements and	Reclassification	Changes in scope, foreign currency translation differences		31/12/2019
Gross value								
Land	576,417			(141)	2,937	(2,217)	(1,165)	575,831
Investment property	1,077							1,077
Buildings	9,598,594	108,573	151,372	(115,048)	430,830	560	237,248	10,412,128
Technical plant, equipment and industrial tooling	4,696,541	711	47,357	(205,860)	323,203	(578)	29,366	4,890,741
Transport equipment	2,309,433	133,541	59,091	(124,351)	116,862	(7,257)	(62,240)	2,425,079
Other plant, property and equipment	238,670	108	6,747	(6,601)	12,901	565	547	252,937
Property, plant and equipment in progress	3,511,664		1,657,577	(2,238)	(901,517)	150	(277,508)	3,988,128
Investment grants	(10,316,643)		(769,308)	2,942	(30,588)		10,520	(11,103,077)
Total gross value	10,615,754	242,932	1,152,837	(451,296)	(45,372)	(8,778)	(63,232)	11,442,845

		Depreciation	Retirements, disposals and		Change	Impact of concession	
	31/12/2018	allowance	reversals	Reclassification	in scope	assets	31/12/2019
Accumulated depreciation and impairment							
Land	2,820	(306)	173			533	3,220
Investment property	(817)						(817)
Buildings	(3,846,425)	(302,457)	108,051	(1,253)	(983)	(57,633)	(4,100,699)
Technical plant, equipment and industrial tooling	(2,942,230)	(249,064)	175,021	1,993	636	(38,229)	(3,051,873)
Transport equipment	(754,698)	(418,639)	107,312	(1,469)	6,656	201,884	(858,954)
Other plant, property and equipment	(171,846)	(20,566)	5,969	1,367	(333)	(50)	(185,460)
Fixed assets in progress							
Investment grants	3,344,645	3,865	246,792		(1)	49	3,595,350
Total accumulated depreciation and impairment	(4,368,550)	987,168	643,318	638	5,975	106,554	(4,599,233)
NET VALUE	6,247,204	408,601	192,022	(44,734)	(2,803)	43,322	6,843,612

The impact of RATP's concession assets is explained in Note 14.

The analysis of the right-of-use assets resulting from the application of IAS 17 and IFRS 16 is presented in Note 12.

The amount of capital assets under construction consists mainly of projects related to extensions of metro lines.

Commitments relating to acquisitions of property, plant and equipment are presented in Note 34.1.

The RATP-Île-de-France Mobilités agreement provides for penalties in the event of failure to implement the equity investment plan. Cumulatively since the beginning of the agreement, RATP believes that they have complied with the equity investment plan in accordance with the contractual clauses.

At 31 December 2019, 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.

12 — Leases

From 1 January 2019, IFRS 16 is applicable to leases. The principles and options considered within the framework of implementation of this standard are set out in the section "Accounting guidelines".

Details of the right-of-use assets recognised under property, plant and equipment

	31/12/2018 IAS 17	IFRS 16 initial application on 1 January	New contracts 2019	Additions	Exits,	Changes in scope, foreign currency translation differences	31/12/2019
Right-of-use assets (IAS 17 + IFRS 16)							
Land	3,142						3,142
Buildings	18,851	108,573	148,093	(35,292)	(2,370)	838	238,693
Technical plant, equipment and industrial tooling	1	711	242	(241)		(16)	696
Transport equipment	13,004	133,541	26,223	(36,804)	(2,110)	4,439	138,292
Other plant, property and equipment		108		(30)		(22)	56
TOTAL NET VALUE	34,998	242,932	174,557	(72,367)	(4,480)	5,239	380,880

Schedule of finance lease liabilities at 31 December 2018 (IAS 17)

	Total	2019	2020	2021	2022	2023	>5 years
Loans related to finance leases	30,659	4,170	3,409	3,316	3,129	2,833	13,803

Schedule of lease liabilities at 31 December 2019 (IFRS 16)

	Total	2020	2021	2022	2023	2024	>5 years
Financial liabilities – Lease transactions – non-current	326,001		75,646	54,592	39,569	34,168	122,024
Financial liabilities – Lease transactions – current	72,886	72,886					
FINANCIAL LIABILITIES – LEASE TRANSACTIONS	398,887	72,886	75,646	54,592	39,569	34,168	122,024

Non-restated lease payments

Lease payments not restated according to IFRS 16 amounted to €37 million. They mainly concern assets with a residual lease value not exceeding twelve months as of 1 January 2019.

Cash impact

The net cash impact of lease payments restated according to IFRS 16 for the year was €52 million paid, including €6 million in interest and €46 million in liabilities.

13 — Specific lease transactions

13.1 Leasehold transactions

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 right of use of the asset. 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 transaction constitute separate transactions 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. At 31 December 2019, the gross amount of assets recognised amounted to €200 million and the amount of liabilities amounted to €203 million. These amounts are offset by €200 million, and therefore the net balance recognised was €3 million.

At 31 December 2019, there were five agreements outstanding with two investors – the Bank of America and State Street.

The risks assumed by RATP are limited to equipment ownership risk 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 totalled €44 million at 31 December 2019;
- in US Treasury bonds: the deposits totalled €62 million at 31 December 2019.

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 transactions

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 agreements

Service concession agreements 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 who these services must be provided and at what price; and
- the grantor controls any significant residual interest in the concession assets upon maturity of the concession. This condition is met
 when the grantor has the right to any residual interest in these
 assets at the end of the agreement.

Under IFRIC 12, the grantor recognises a financial asset ("financial asset model") in its balance sheet, representing an unconditional right to receive a cash amount and/or an intangible asset ("intangible asset model") representing a right to invoice users.

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. The remuneration of receivable is recognised in "Other income from ordinary activities".

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.

Application to RATP

RATP Group believes that the operating agreements for RATP's transport services in Île-de-France, including the multi-year agreement entered into with Île-de-France Mobilités, and certain agreements with RATP Dev's transport subsidiaries should be accounted for under IFRIC 12.

The Île-de-France Mobilités 2016-2020 agreement falls within the scope of application of IFRIC 12 as:

- the services rendered correspond to a public service mission;
- Île-de-France Mobilités determines what transport services must be provided and the pricing policy;
- the assets necessary for operation are the returnable and reversionary assets;

- Île-de-France Mobilités controls a significant residual interest at the end of the concession on these assets:
 - for rolling stock and related maintenance equipment classified as returnable assets, when the concession rights expire, Îlede-France Mobilités will repurchase the assets at their carrying amount net of grants, corresponding to the amount reported in the parent company financial statements where the assets are recognised under tangible assets,
- for operating assets (such as bus stations, etc.) classified as reversionary assets, Île-de-France Mobilités can exercise a buyback option when the operating rights expire.

The financial asset model is applied to returnable assets insofar as RATP has an unconditional right to receive cash from Île-de-France Mobilités until the end of the period of operation, regardless of user traffic, which results in the recognition of a financial asset. The value of this assets corresponds to the carrying amount of the returnable assets in the parent company financial statements, less grants, on the reporting date.

The mixed model is applied to reversionary assets to the extent that RATP benefits on behalf of Île-de-France Mobilités:

- from an unconditional right to receive cash for these assets over the current period of contract with Île-de-France Mobilités (2016-2020).
 This right results in the recognition of a financial asset. The value of this financial assets corresponds to the depreciation and amortisation expenses, provided for in the parent company financial statements between the reporting date and the end of the contract, for reversionary assets held on the reporting date;
- from a right to invoice users for the period beyond 2020. This right results in the recognition of an intangible asset. The value of this right corresponds to the residual portion of the carrying amount of the reversionary assets in the parent company financial statements on the reporting date.

Financial assets arising from the application of IFRIC 12 are recognised under "Financial concession assets" in the consolidated balance sheet. The portion of the financial assets due within one year is 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 IFRS 9, 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.

Contributions paid by Île-de-France Mobilités to RATP include the C2 contribution to fund investments. The contribution covers the cost of capital employed, including interest expense and net amortisation expense recorded in the parent company financial statements. According to IFRS 12, this financing mechanism is analysed as recovery of the financial asset on the one hand, and remuneration of the receivable on the other hand. The recovery reduces the asset and the remuneration is income, recorded under "Other income from ordinary activities".

Furthermore, pursuant to IFRS 15 "Revenue from contracts with customers", 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 "Other revenue from ordinary activities".

Application to subsidiaries

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 at 31 December 2019 is:

	31/12/2019	31/12/2018
Amount gross	3,548,568	3,685,761
Impairment		
Concession financial assets – non-current	3,548,568	3,685,761
Amount gross	287,612	294,243
Impairment		
Concession financial assets – current	287,612	294,243

The effect of applying IFRIC 12 on the income statement for financial year 2019 is as follows:

	31/12/2019 prior to IFRIC 12	Cancelled depreciation and amortisation ⁽¹⁾	Cancelled compensation and amortisation ⁽²⁾	Remuneration of concession financial assets ⁽³⁾	Purchase/sale transactions ⁽⁴⁾	31/12/2019 after IFRIC 12
Revenue	6,149,186		(334,608)	(110,496)		5,704,082
Other income from ordinary activities	90,364			110,496	196,491	397,351
Income from ordinary activities	6,239,549	_	(334,608)	_	196,491	6,101,432
Cost of sales	(420,380)				(196,491)	(616,871)
Other purchases and external charges	(936,996)					(936,996)
Tax, duties and other payables	(331,765)					(331,765)
Payroll costs	(3,366,171)					(3,366,171)
Other operating expenses	(16,133)					(16,133)
EBITDA	1,168,104	_	(334,608)	_	_	833,496
Depreciation/amortisation	(813,931)	334,608				(479,323)
Additions to and reversals of provisions	(25,301)					(25,301)
Gain/(losses) on disposal of assets	(7,783)					(7,783)
Other operating income (expenses)	(8,606)					(8,606)
Income from equity-accounted associates	6,769					6,769
Operating income (EBIT)	319,253	334,608	(334,608)	_	_	319,253
Of which EPIC return		281,893	(281,893)	108,251	195,569	
Of which EPIC reversals		47,379	(47,379)	1,756		
Of which Subsidiaries		5,336	(5,336)	489	922	

⁽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 contractual rate set in the Île-de-France Mobilités agreement.

⁽⁴⁾ The expenses incurred by RATP for investments in returnable assets are recognised in the income statement and transferred to Île-de-France Mobilités 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 cashgenerating 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, USA/UK/South Africa 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. Where there is an impairment, such loss is recognised in the operating income. Impairment on goodwill is irreversible.

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.

Following the application of IFRS 16, the asset base must be included in the right of use. The simplification method possible for 2019, consisting of including the right of use in the asset base and removing lease debt from it, was used.

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)

Contextual elements

The law of 24 December 2019 on mobility orientation (LOM) determined the conditions for the regulation of Infrastructure management activities and RATP safety by the Transport Regulatory Authority (ART). The implementing decree will be signed in 2020.

In 2020, the current agreement between RATP and Île-de-France Mobilités will end and a new agreement for the period 2021-2024 taking the LOM and the determination of a new method of consideration into account will be negotiated, the features of which method are not yet known.

These changes will lead to developments around the activities of RATP and their remuneration.

Awaiting a precise definition of these changes, tests were carried out for the two previously defined CGUs, namely the Infrastructure management (IM) and Transport operations (TO) activities, according to the assumptions specified in the subsequent paragraphs.

Carrying amount of disposed assets

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 remuneration arrangements for infrastructure management and line operations in order to ensure that costs are covered and there is a return on capital employed.

The tests were carried out based on the value of the assets as at 1 January 2019. 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 recoverable amount of intangible and financial assets, recognised pursuant to IFRIC 12 and corresponding to returnable and reversionary assets driven by TO activities, corresponds to their realisable value as defined by the law and its implementing decrees.

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 amount of fully-owned assets of the Transport operations and the Infrastructure management assets corresponds to their value in use, which is determined on the basis of future cash flows, net of tax, which have been forecast.

In the context indicated above, the data considered for the impairment tests for the 2019 closing are as follows:

- for 2019: the income for the financial year ended was taken into account, excluding the exceptional effect of the strike against the pension reform. This financial year includes the allocation of revenue corresponding to the charges for occupying public space (advertising revenues, commercial rents and telecom charges), which cannot be separated from the infrastructure and to Infrastructure management activities, while they were allocated to Transport operations activities until 2018;
- for 2020: the 2020 budget based on the financial provisions of the agreement between Île-de-France Mobilités and RATP for 2016-2020, discounted as required by changes to interest rates;
- beyond 2020: the conditions of the current contract were renewed indefinitely, without taking into account the opening of the market to competition. For IM, a standard investment for renewal was estimated.

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.

	CGUs						
	Infrastructure management	Transport operations Fully-owned assets					
Method for determining the recoverable value	Value in use	Value in use					
Discount rate	4.60%	5.20%					
Perpetual growth rate	2.00%	2.00%					

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.

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:

- a +0.2% change in discount rate for the IM CGU and +0.6% for the TO CGU would equalise the recoverable value and net carrying amount of each CGU;
- a -0.2% change in terminal growth rate for the IM CGU and -0.4% for the fully-owned assets of the TO CGU would equalise the recoverable value and net carrying amount of each CGU;
- a change of +€10 million in investment renewals for the IM CGU and +€20 million for the fully-owned assets of the TO CGU would equalise the recoverable value and net carrying amount of the CGU.

15.2 RATP DEV's cash-generating units (CGUs)

Impairment tests were performed on the other existing CGUs at 31 December 2019.

The other CGUs are defined at the level of the geographical area (France/Switzerland and USA/UK/South Africa) as well as a specific business for Sightseeing. These CGUs are included in the Group's Transport operations operating segment.

The recoverable value of the principal CGUs was determined on the basis of the following key assumptions:

	CGUs					
	France/ Switzerland		USA/UK/South Africa			
Method for determining the recoverable value	Value in use	Value in use			Value in use	
		USA	USA United Kingdom South Africa			
Discount rate	5.30%	6.30%	5.30%	13.40%	6.30%	
Perpetual growth rate	2.00%					

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.

The impairment tests performed did not reveal any impairment losses on the CGUs defined above.

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 +17.1% change in discount rate for the France/Switzerland CGU,
 +4.5% for United States and +1.8% for the UK within the United

States/United Kingdom/South Africa CGU and +0.8% for the Sightseeing CGU would equalise the recoverable value and net carrying amount of each CGU;

 a -0.95% change in terminal growth rate for the Sightseeing CGU would bring into line the recoverable value and net carrying amount of the CGU.

During the year, no other event likely to have an impact on the goodwill values was recorded after the impairment tests performed on the CGUs.

16 — Interests in the subsidiaries

The list of fully-consolidated RATP subsidiaries is supplied in Note 39. 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 analysed as follows:

	31/12/2019				31/12/2018			
Group companies	% of interest	Equity- accounted investments	Of which share of net income	Of which share of other items of comprehensive income	% of interest	Equity- accounted investments	Of which share of net income	Of which share of other items of comprehensive income
Systra group	43.38	116,910	(327)	316	41.92	87,633	(5,227)	(1,059)
Other associates		9,227	(1,600)	28		10,799	2,377	28
Joint ventures		18,838	8,696	582		9,202	(11,021)	724
TOTAL		144,975	6,769	926		107,633	(13,871)	(307)

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.

Balance sheet – Systra	31/12/2019	31/12/2018
Non-current assets	320,719	202,292
Current assets	482,190	475,219
Non-current liabilities	176,262	107,684
Current liabilities	421,140	420,774
NET ASSETS (100%)	205,507	149,053
Percentage of equity holding	43.4%	41.9%
Group share in net assets	90,682	61,404
Goodwill	26,228	26,228
EQUITY VALUE	116,910	87,633
Income statement – Systra	31/12/2019	31/12/2018
Income from ordinary activities	631,173	586,200
Net income (100%)	(754)	(12,470)
Group share in net income	(327)	(5,227)
Other comprehensive income	316	(1,059)

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 — Non-consolidated securities

In accordance with IFRS 9, non-consolidated securities are evaluated at their fair value.

The Group has chosen to record subsequent changes in the fair value of these securities under equity in other non-recyclable comprehensive income (irrevocable choice exercised security-wise).

In the event of a sale, the net income from the transaction is recognised in equity and does not impact net income.

		31/12/2018							
	Non- consolidated securities 01/01/2018	Increase	Decrease	Currency translation gains and losses	Other	Non- consolidated securities 31/12/2018			
Total gross value	47,677	10,017	(51)	(9)	1,023	58,657			
Impairment	(10,046)	(3,189)	3,015			(10,220)			
TOTAL NET VALUE	37,631	6,828	2,964	(9)	1,023	48,437			

		31/12/2019							
	Non- consolidated securities 01/01/2019	Increase	Decrease	Currency translation gains and losses	Other	Non- consolidated securities 31/12/2019			
Total gross value	58,657	3,277	(10,142)		630	52,421			
Impairment	(10,220)	(1,153)	10,883		96	(394)			
TOTAL NET VALUE	48,437	2,124	741		726	52,027			

Non-consolidated securities relate to the following:

	Net value	e % equity interest
RATP Habitat ⁽¹⁾	35,89	100%
Cityscoot	6,879	8%
Zenpark	3,000	9%
Paris-Saclay Seed Fund	2,000	4%
Klaxit	1,000	15%
Linea ⁽²⁾	820	33%
Irise	750	10%
Other	1,670	5
TOTAL	52,02	,

⁽¹⁾ Low-cost housing company HLM RATP Habitat is excluded from the scope of consolidation for the reasons mentioned in Note 2.1. Financial data at 31 December 2018 of the low-cost housing company HLM RATP Habitat is as follows:

⁻ revenue: €68 million;

⁻ balance sheet total = €854 million, including €452 million of net debt;

net income: €7 million.

⁽²⁾ RATP is a shareholder of 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 consist of financial assets that do not fall under the previously defined categories of financial assets, mainly receivables relating to subsidiaries and affiliated companies, loans, security deposits and guarantees.

These financial assets are recorded at amortised cost using the effective interest rate method.

Impairment is assessed individually taking into account the risk profile of the counterparty and the guarantees obtained. When these financial assets are initially recognised, impairment is systematically recognised for the expected credit losses resulting from events that may occur in the next twelve months. In the event of a significant deterioration in the credit quality of the counterparty, the initial impairment is supplemented to cover all expected losses over the residual maturity of the receivable.

19.1 Other non-current financial assets

			(Currency translation		
	31/12/2017	Increase	Decrease	gains and losses	Other	31/12/2018
Deposits relating to leases	230,906				(210,831)	20,075
Fair value deposits	75,853		(870)		2,441	77,424
Social housing loans (CIL)	27,613				(3,859)	23,754
Other loans and receivables	17,303	13,497	(16,532)	37	4,601	18,907
Gross other non-current financial assets	351,675	13,497	(17,402)	37	(207,648)	140,160
Provisions for other financial assets	(91)	(115)	17			(189)
Net other non-current financial assets	351,584	13,382	(17,385)	37	(207,648)	139,971

	24/42/2040	la anno an		Currency translation	Other	24/42/2040
	31/12/2018	Increase	Decrease	gains and losses	Other	31/12/2019
Deposits relating to leases	20,075				(2,096)	17,979
Fair value deposits	77,424					77,424
Social housing loans (CIL)	23,754				(3,057)	20,697
Other loans and receivables	18,907	17,578	(11,100)	34	2,678	28,098
Gross other non-current financial assets	140,160	17,578	(11,100)	34	(2,475)	144,198
Provisions for other financial assets	(189)	(79)	10		18	(240)
Net other non-current financial assets	139,971	17,499	(11,090)	34	(2,457)	143,958

Deposits relating to leases (at amortised cost) concern contracts terminated before expiry of the lease period. They are backed by borrowings for lease terminations shown under loans and borrowings (Note 26.1).

Loans mainly correspond to the housing loans granted by RATP to low-cost housing management companies (CIL).

19.2 Other current financial assets

The cash collateral corresponds to the amounts paid as guarantee for loans related to lease terminations shown under loans and borrowings (Note 26.1).

	Currency translation				
	31/12/2017	Increase/decrease	gains and losses	Other	31/12/2018
Dividends receivable	4				4
Social housing loans (CIL)	4,971			176	5,147
Deposits relating to leases	21,297	(228,851)		207,554	
Other loans, deposits and guarantees	1,004	(265)	29		768
Cash collateral relating to leases	245,400	(192,100)			53,300
Other investments – current	165,810	(92,958)			72,852
OTHER CURRENT FINANCIAL ASSETS	438,486	(514,174)	29	207,730	132,070

			31/12/2019		
	31/12/2018	Increase/decrease	Currency translation gains and losses	Other	31/12/2019
Dividends receivable	4	(4)			
Social housing loans (CIL)	5,147			696	5,843
Deposits relating to leases				11,804	11,804
Other loans, deposits and guarantees	768	391	11	(140)	1,031
Cash collateral relating to leases	53,300	14,695			67,995
Other investments – current	72,852	(10,854)		(18)	61,980
OTHER CURRENT FINANCIAL ASSETS	132,070	4,228	11	12,342	148,653

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

	31/12/2018				31/12/2019	
	Gross value	Impairment	Net value	Gross value	Impairment	Net value
Raw materials and supplies	273,620	(51,847)	221,774	280,128	(52,328)	227,800
Other supplies	440		440	815		815
Work in progress	11,861		11,861	17,127		17,127
Merchandise	364		364	778		778
Finished goods	3,743	(108)	3,635	3,907	(100)	3,807
TOTAL	290,029	(51,955)	238,074	302,754	(52,428)	250,327

20.2 Change in inventory impairment losses

	31/12/2018	Additions	Reversals	Foreign currency translation differences	Other and differences reclassification	31/12/2019
Impairment of inventories	(51,847)	(4,443)	3,881	(5)	86	(52,328)
Impairment of work in progress	(108)	(100)	108			(100)
TOTAL	(51,955)	(4,543)	3,989	(5)	86	(52,428)

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.

For operating receivables, the Group reviews its trade receivables on an individual basis taking into account the probability of counterparty default and the hedging level of these receivables and uses the simplified IFRS 9 method of provisioning expected losses over the residual maturity of the receivables.

	31/12/2019	31/12/2018
Gross trade receivables	435,125	346,267
Impairment of trade receivables	(8,752)	(9,196)
Net trade receivables	426,373	337,071
Advance payments	11,519	6,929
Prepaid expenses	31,363	54,472
Receivables from the State and other authorities	335,420	251,970
Investment grants receivable	107,077	131,960
Other receivables	472,569	300,854
Income tax receivables	15,001	87,301
Impairment of other receivables	(6,266)	(5,580)
Other receivables	966,682	827,907
TOTAL TRADE AND OTHER RECEIVABLES	1,393,055	1,164,978

	31/12/2019	31/12/2018
Impairment of trade receivables, at beginning of year	(9,196)	(9,949)
Write-downs during the period	(1,540)	(1,590)
Reclassification	834	
Reversals used during the year	1,150	2,344
IMPAIRMENT OF TRADE RECEIVABLES, AT END OF THE YEAR	(8,752)	(9,196)

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, highly-liquid investments with negligible risk of change in value. They are held exclusively to meet the Group's short-term cash requirements.

They include:

- negotiable debt instruments with an original maturity of less than three months and issued by highly-rated counterparties;
- money market UCITS investments;
- term deposits maturing in less than three months or redeemable with no risk to invested capital and without notice in less than three months.

Cash and cash equivalents are measured at amortised cost, or at fair value through profit or loss, depending on the nature of the investment.

	31/12/2019	31/12/2018
Cash equivalents	1,210,988	767,241
Cash	333,049	308,257
TOTAL	1,544,037	1,075,498

Total cash and cash equivalents presented in the cash flow statement comprise the following:

	31/12/2019	31/12/2018
Cash and cash equivalents (balance sheet)	1,544,037	1,075,498
Bank loans – current	(102,706)	(74,652)
Closing cash and cash equivalents (cash flow statement)	1,441,331	1,000,845

23 — Equity

23.1 Capital endowment

RATP was formed by the law 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. This allocation 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 — Employee benefits

Employee benefits comprise post-employment benefits and other long-term benefits.

	31/12/2019	31/12/2018
Retirement benefits	353,023	297,708
Death indemnities for retirees	43,287	37,984
Death indemnities for employees in service	21,770	19,951
Early retirement benefits	2,023	2,572
Work-related accident and disability pensions	380,786	305,108
Retirement benefits of foreign subsidiaries	3,416	7,388
Total post-employment benefits	804,305	670,711
Phased retirement	18	18
Seniority bonuses	33,653	31,219
Long-term sick leave	1,968	3,086
Unemployment benefit	9,259	6,455
Work-related accident and disability pensions	24,607	22,309
Other long-term benefits	1,270	1,050
Total long-term benefits	70,775	64,137
TOTAL	875,080	734,848

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 of 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 maturity 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 favourable 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 fulfil 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

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 benefits

Changes in benefits for post-employment benefits were as follows:

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Occupational injury and disease benefits	Early retirement	Retirement plans of foreign subsidiaries	Total
Net liability as at 1 January 2018	304,999	16,382	40,232	303,277	2,839	10,678	678,407
Current service cost and interest cost	21,893	1,566	587	22,995	36	856	47,933
Benefits paid by the employer	(17,067)	(1,040)	(1,504)	(11,882)	(477)		(31,970)
Actuarial gains/(losses)	(11,623)	3,043	(1,331)	(9,282)	174	(939)	(19,957)
Asset ceiling effect (IFRIC 14)						(760)	(760)
Contributions paid into the plan						(2,431)	(2,431)
Changes in scope	(542)						(542)
Effect of change in exchange rates	47					(15)	31
NET LIABILITY AS AT 31 DECEMBER 2018	297,707	19,951	37,984	305,108	2,572	7,388	670,711

	Retirement indemnities		Death indemnities for retirees	Occupational injury and disease benefits	Early retirement	Retirement plans of foreign subsidiaries	Total
Net liability as at 1 January 2019	297,707	19,951	37,984	305,108	2,572	7,388	670,711
Current service cost and interest cost	23,783	1,767	655	23,943	41	324	50,513
Benefits paid by the employer	(12,685)	(908)	(1,664)	(11,668)	(464)		(27,389)
Actuarial gains/(losses)	41,933	960	6,312	63,403	(126)	4,579	117,061
Contributions paid into the plan						(2,309)	(2,309)
Changes in scope	2,245					(7,032)	(4,787)
Effect of change in exchange rates	39					465	504
NET LIABILITY AS AT 31 DECEMBER 2019	353,023	21,770	43,287	380,786	2,023	3,416	804,305

24.1.3 Recognised expense

The expense recognised for the year can be broken down as follows:

Expense recognised in 2018	Retirement indemnities		Death indemnities for retirees	Occupational injury and disease benefits	Early retirement	Retirement plans of foreign subsidiaries	Total
Service cost	(17,635)	(1,320)		(18,336)		(617)	(37,909)
Interest cost	(4,258)	(246)	(587)	(4,659)	(36)	(238)	(10,024)
IMPACT ON NET INCOME	(21,893)	(1,566)	(587)	(22,995)	(36)	(856)	(47,933)

Expense recognised in 2019	Retirement indemnities		Death indemnities for retirees	Occupational injury and disease benefits	Early retirement	Retirement plans of foreign subsidiaries	Total
Service cost	(18,395)	(1,407)		(18,377)		(334)	(38,512)
Interest cost	(5,388)	(360)	(655)	(5,566)	(41)	10	(12,001)
IMPACT ON NET INCOME	(23,783)	(1,767)	(655)	(23,943)	(41)	(324)	(50,513)

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 2018	Retirement indemnities		Death indemnities for retirees	Occupational injury and disease benefits	Early retirement	Savings scheme contribution	foreign	Total
Opening balance	(14,281)	646	(6,026)	(78,627)	(10,103)	(25,500)	(1,326)	(135,217)
Change in actuarial gains and losses for the year	12,113	(3,043)	1,331	9,282	(174)		1,805	21,314
Other	(792)						(1,790)	(2,582)
Effect of change in exchange rates	(591)						(2,493)	(3,084)
CLOSING BALANCE	(3,551)	(2,397)	(4,695)	(69,345)	(10,277)	(25,500)	(3,804)	(119,569)

Amounts recognised directly in equity in 2019	Retirement indemnities		Death indemnities for retirees	Occupational injury and disease benefits	Early retirement	Savings scheme contribution	Retirement plans of foreign subsidiaries	Total
Opening balance	(3,551)	(2,397)	(4,695)	(69,345)	(10,277)	(25,500)	(3,804)	(119,569)
Change in actuarial gains and losses for the year	(41,915)	(960)	(6,312)	(63,403)	126		(4,660)	(117,124)
Other	(1,561)						981	(580)
CLOSING BALANCE	(47,026)	(3,357)	(11,007)	(132,748)	(10,151)	(25,500)	(7,483)	(237,272)

24.1.5 Change in commitment and plan assets

	Retirement indemnities	Death indemnities (employees in service)	Death indemnities for retirees	Occupational injury and disease pensions	Early retirement	Retirement plans of foreign subsidiaries	Total post- employment benefits
Obligation as at 1 January 2018	304,999	16,382	40,232	303,277	2,839	156,947	824,676
Service cost	17,635	1,320		18,336		617	37,909
Interest cost	4,258	246	587	4,659	36	3,810	13,596
Employee contributions						6	6
Benefits paid	(17,067)	(1,040)	(1,504)	(11,882)	(477)	(5,959)	(37,929)
Actuarial gains/(losses)	(11,623)	3,043	(1,331)	(9,282)	174	(7,555)	(26,573)
Changes in scope	(542)						(542)
Effect of change in exchange rates	47					(1,067)	(1,020)
Other						14	14
Obligation as at 31 December 2018	297,707	19,951	37,984	305,108	2,572	146,813	810,136
Plan assets as at 31 December 2018						(140,610)	(140,610)
Obligation net of plan assets	297,707	19,951	37,984	305,108	2,572	6,203	669,526
IAS 19 accumulated adjustment						1,185	1,185
NET LIABILITIES AS AT 31 DECEMBER 2018	297,708	19,951	37,984	305,108	2,572	7,388	670,711

	Retirement indemnities	Death indemnities (employees in service)		Occupational injury and disease pensions		Retirement plans of foreign subsidiaries	Total post- employment benefits
Obligation as at 1 January 2019	297,708	19,951	37,984	305,108	2,572	146,813	810,136
Service cost	18,395	1,407		18,377		340	38,518
Accretion charge	5,388	360	655	5,566	41	3,539	15,550
Employee contributions							
Benefits paid	(12,685)	(908)	(1,664)	(11,668)	(464)	(3,751)	(31,140)
Actuarial gains/(losses)	41,933	960	6,312	63,403	(126)	15,520	128,002
Changes in scope	2,245					(32,653)	(30,408)
Effect of change in exchange rates	38					7,637	7,676
Other						(231)	(231)
Obligation as at 31 December 2019	353,023	21,770	43,287	380,786	2,023	137,214	938,103
Plan assets as at 31 December 2019						(133,798)	(133,798)
Obligation net of plan assets	353,023	21,770	43,287	380,786	2,023	3,416	804,305
IAS 19 accumulated adjustment							
NET LIABILITIES AS AT 31 DECEMBER 2019	353,023	21,770	43,287	380,786	2,023	3,416	804,305
					:	31/12/2019	31/12/2018
Net assets at 1 January						140,610	148,235
Interest on assets						3,476	
Employer contributions						2,308	2,431
Employee contributions							6
D C: 11C 1 :						(0.754)	(= 0=0)

	31/12/2019	31/12/2018
Net assets at 1 January	140,610	148,235
Interest on assets	3,476	3,574
Employer contributions	2,308	2,431
Employee contributions		6
Benefits paid from plan assets	(3,751)	(5,959)
Actuarial gains/(losses)	10,942	(6,615)
Changes in scope	(26,728)	
Effect of change in exchange rates	7,171	(1,052)
Other	(232)	(10)
NET ASSETS AT 31 DECEMBER	133,798	140,610

Plan assets of subsidiaries are invested as follows: approximately 24% in equities, 42% 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:

	31/12/2	2019	31/12/2018		
	Eurozone	United Kingdom	Eurozone	United Kingdom	
Discount rate	0.75%	2.05%	1.75%	2.55% to 2.90%	
Inflation rate	2.00%	2.70%	2.00%	3.10% to 3.30%	
Salary increase rate including inflation	2.00% to 2.20%	2.65%	2.00% to 2.20%	2.20% to 2.95%	
Mortality table	TGH 05/TGF 05	S2PA	TGH 05/TGF 05	S2PA	
Retirement age	60.9	65	60.8	65	
Pension revaluation rate	NA	2.05%	NA	2.05% to 2.4%	
Turnover rate	0.00%	NC	0.00%	NC	

An increase or decrease of 25 basis points in the discount rate would have increased post-employment obligations by \leq 32 million and decreased it by \leq 35 million.

The average duration of post-employment benefit obligations is fifteen years, at the 2018 reporting date.

24.2 Other long-term benefits

Other long-term benefits are measured according to actuarial calculations. They correspond to the value of future benefits acquired by personnel in exchange for the services provided.

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 of 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 Employment division, RATP provides employees whose employment contracts have reached termination with replacement income 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	Occupational injury and disease benefits	Phased U	Inemployment benefits	Long-term sick leave	Other	Total long-term benefits
Net liability recognised at 1 January 2018	28,392	22,612	204	8,702	3,086	1,000	63,994
Cost of services provided	2,192	3,129					5,321
Benefits paid	(1,372)	(4,914)					(6,286)
Accretion charge	441	342					783
Actuarial gains and losses	1,566	1,142					2,708
Net remeasurements			(186)	(2,247)			(2,433)
Other						50	50
NET LIABILITY RECOGNISED AT 31 DECEMBER 2018	31,219	22,309	18	6,455	3,086	1,050	64,137

	Seniority bonuses	Occupational injury and disease benefits	Phased I retirement	Unemployment benefits	Long-term sick leave	Other	Total long-term benefits
Net liability recognised at 1 January 2019	31,219	22,309	18	6,455	3,086	1,050	64,137
Cost of services provided	349	5,760					6,109
Benefits paid	(1,799)	(5,310)					(7,109)
Accretion charge	569	428					998
Actuarial gains and losses	3,314	1,420					4,734
Net remeasurements				2,804	(1,118)		1,687
Other		-				220	220
NET LIABILITY RECOGNISED AT 31 DECEMBER 2019	33,653	24,607	18	9,259	1,968	1,270	70,775

24.2.2 Main actuarial assumptions

	31/12/2019	31/12/2018
Discount rate	0.75%	1.75%
Inflation rate	2.00%	2.00%
Salary increase rate including inflation	2.20%	2.20%
Mortality table	TGH 05/TGF 05	TGH 05/TGF 05
Retirement age	60.9	60.8
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 million.

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 of all provisions (assets and liabilities) on the income statement is as follows:

	31/12/2018	31/12/2019
Additions to and reversals		
of provisions	8,520	(25,301)

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.

	31/12/2017	Additions	Provisions used	Unused provisions	Reclassification, changes of scope and exchange rate	31/12/2018
Non-current provisions	160,983	26,449	(10,811)	(18,835)	(2,839)	154,947
Decommissioning ⁽¹⁾	67,040		(312)	41	41	66,810
Disputes ⁽²⁾	8,816	3,370	(1,369)	(1,805)	1	9,014
Other expenses	23,816	2,542	(614)	(41)	(816)	24,887
Other risks ⁽³⁾	61,311	20,537	(8,515)	(17,031)	(2,066)	54,237
Current provisions	67,640	21,653	(10,274)	(10,446)	(2,693)	65,880
Disputes ⁽²⁾	19,023	3,234	(2,651)	(3,610)	24	16,020
Other expenses	5,041	1,870	(1,554)		(3)	5,354
Other risks ⁽³⁾	43,576	16,548	(6,068)	(6,837)	(2,713)	44,506
TOTAL PROVISIONS	228,623	48,102	(21,084)	(29,282)	(5,532)	220,827

	31/12/2018	Additions P	rovisions used	Unused provisions	Reclassification, changes of scope and exchange rate	31/12/2019
Non-current provisions	154,947	38,234	(13,073)	(12,629)	512	167,992
Decommissioning ⁽¹⁾	66,810		(528)	(57)		66,226
Disputes ⁽²⁾	9,014	3,457	(1,172)	(1,594)	14	9,719
Other expenses	24,887	6,569	(93)	(1,273)	337	30,427
Other risks ⁽³⁾	54,237	28,208	(11,279)	(9,706)	161	61,620
Current provisions	65,880	39,368	(12,697)	(9,658)	(212)	82,681
Disputes ⁽²⁾	16,020	5,438	(360)	(3,187)	(2)	17,908
Other expenses	5,354	1,726	(1,307)		(328)	5,445
Other risks ⁽³⁾	44,506	32,205	(11,029)	(6,470)	117	59,328
TOTAL PROVISIONS	220,827	77,602	(25,770)	(22,287)	300	250,673

- (1) Provisions for decommissioning railway rolling stock are recorded with an offsetting entry under fixed assets as the components 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, on the basis of cases already declared, for an amount of €89 million. 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 Îlede-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.

Issuance of new debt securities

Under its Euro medium-term note (EMTN) programme, RATP issued bonds:

- for a nominal amount of €500 million in June 2019, maturing in 2029 and bearing fixed interest at 0.35%;
- for a nominal amount of €87 million in December 2019, maturing in 2036 and bearing fixed interest at 0.40%.

26.1 Breakdown of current and non-current loans and borrowings

	31/12/2019	31/12/2018
Bond issue	4,971,541	4,384,907
Île-de-France loans	129,078	141,369
Loans related to lease terminations	17,979	20,075
Borrowings from credit institutions	157,421	163,274
Loans related to finance leases		26,516
Deposits and guarantees received	6,377	6,281
Other loans and borrowings		2,701
Non-current loans and borrowings	5,282,396	4,745,123
Bond issue		412,553
Île-de-France loans	16,467	18,047
Corporate savings plan loans	249,232	266,478
Loans related to lease terminations	11,804	
Borrowings from credit institutions	21,987	30,190
Loans related to finance leases		4,143
Deposits and guarantees received		57,500
Commercial paper	1,279,267	1,002,876
Other loans and borrowings	32	33
Bank loans	102,706	74,655
Accrued interest	49,049	51,488
Current loans and borrowings	1,730,544	1,917,964
TOTAL	7,012,940	6,663,087

26.2 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 the derivative instruments used to hedge foreign currency 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.

	31/12/2019	31/12/2018
Financial liabilities	7,012,940	6,663,087
Cash flow hedging instruments		(115,430)
Fair value derivative instruments on options	1,258	
Accrued interest	(49,049)	(51,488)
Advance on social housing (CIL) loans	(20,474)	(25,289)
Deposits and guarantees ⁽¹⁾	(29,783)	(20,075)
Other financial assets relating to leases	(53,190)	(53,900)
Short-term investments	(61,998)	(72,852)
Cash and cash equivalents	(1,544,037)	(1,075,498)
Other ⁽²⁾	(73,435)	(60,093)
GROUP NET DEBT	5,182,233	5,188,463

⁽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 \in 61 million at 31 December 2019.

Change in liabilities from financing activities

	31/12/2018	Financing flows	Operating flows	Investing flows		Currency translation	Fair value	Reclass. current/ non- current assets	Other ⁽¹⁾	31/12/2019
Loans and borrowings – non-current	4,745,123	296,889		1,694		9,171	(106,913)	366,348	(29,915)	5,282,396
Loans and borrowings - current	1,917,964	160,775	(2,428)		27,856	274	(2,454)	(366,348)	(5,094)	1,730,544
TOTAL LOANS AND BORROWINGS	6,663,087	457,663	(2,428)	1,694	27,856	9,445	(109,367)	0	(35,009)	7,012,940

⁽¹⁾ Of which (30,659) lease loans reclassified as «Financial liabilities – Lease transactions». Of which (4,151) outside the scope.

26.3 Maturities of loans and borrowings

	2020	2021	2022	2023	2024	>5 years
Bond issues (in euros)		600,000	621,000	622,100	654,000	2,489,600
Interest on bond issues (in euros)	115,140	115,140	91,124	73,784	48,963	229,797
Île-de-France loans	16,845	15,943	14,530	14,530	13,249	93,734
Corporate savings plan loans	249,308					
Interest on corporate savings plan loans	1,451					
Loans related to lease terminations	13,080					23,273
Borrowings from credit institutions	21,987	28,038	14,113	14,113	14,113	87,043
Deposits and guarantees received	6,377					
Commercial paper	1,279,267					
Other loans and borrowings	29					
Bank loans	102,709					
Accrued interest	49,049					
TOTAL LOANS AND BORROWINGS	1,855,243	759,121	740,767	724,527	730,325	2,923,446

Future cash flows from the table above are at face value (not discounted).

The breakdown by main currency and type of interest rate is presented in Note 29.

26.4 Bond issues

Bond issues only concern RATP.

Bond issue	31/12/2019	31/12/2018	Change	Effective interest rate
CHF 2.929% 27 June 2019		133,100	(133,100)	
CHF 2.625% 6 November 2019		279,460	(279,460)	
EUR 4.00% 23 September 2021	598,819	598,450	369	4.11%
EUR 2.875% 9 September 2022	598,341	597,507	834	3.01%
EUR 4.125% 13 April 2023	598,619	598,422	197	4.20%
EUR 0.375% 15 June 2024	497,437	496,880	557	0.49%
EUR 1.38% 16 September 2024	149,901	149,964	(63)	1.39%
EUR 2.441% 25 October 2025	49,852	49,837	15	2.49%
EUR 3.03% 25 October 2025	199,768	199,762	6	3.05%
EUR 3.75% 19 October 2026	448,574	448,329	245	3.81%
EUR 0.875% 25 May 2027	498,331	498,132	199	0.92%
EUR 0.35% 20 June 2029	497,727			0.40%
EUR 4.11% 1 July 2031	49,784	49,785	(1)	1.78%
EUR 1.75% 25 May 2031	498,285	498,204	81	4.16%
EUR 0.40% 19 December 2036	86,482			0.43%
EUR 1.900% 26 June 2048	99,847	99,851	(4)	1.91%
EUR 1.905% 6 July 2048	49,875	49,876	(1)	1.92%
EUR 1.820% 18 July 2048	49,899	49,901	(2)	1.83%
TOTAL BOND ISSUES	4,971,541	4,797,460	(410,128)	

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.

	31/12/2019	31/12/2018
Trade payables	494,014	363,750
Payables on fixed assets	607,513	605,741
Taxes and payroll-related payables	719,669	714,394
Other operating payables	148,041	6,070
Prepaid income	213,867	116,305
Other payables	584,879	594,097
Income tax liabilities	9,688	10,795
TOTAL	2,777,671	2,411,153

All trade payables are due within one year.

28 — Change in working capital requirement

	31/12/2019	31/12/2018
Inventories	(28,753)	(27,280)
Advances and down payments to suppliers	(5,772)	(2,489)
Trade receivables and related accounts	(86,064)	(60,964)
Receivables from the State and other public authorities	120,723	29,113
Receivables from Île-de-France Mobilités	(178,841)	7,545
Other receivables	(129,554)	(230,171)
Prepaid expenses	(32,365)	(4,355)
Advances and down payments received	136,544	(15,723)
Trade and related payables	146,542	29,062
Taxes and payroll-related payables	(195,710)	(20,189)
Île-de-France Mobilités payables	180,459	8,840
Other liabilities	671	31,612
Prepaid income	159,664	23,690
Prepaid income (leases)	(440)	(543)
TOTAL IMPACT OF THE CHANGE IN WCR	87,103	(231,853)

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 or floors) to strictly back an existing or highly probable debt.

Foreign currency hedges

RATP Group systematically hedges the exchange rate risk of its foreign currency-denominated bond issues using currency swaps or cross currency swaps.

Management of risk of commodity price increases

RATP Group may use commodity derivatives. RATP generally carries out these transactions on behalf of its subsidiaries as "back to back".

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 most derivatives and the diversification of the short-term investment portfolio.

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. RATP also has a maximum issuance programme of €2,500 million in commercial paper and has average available outstanding investments of an average €1,342 million for 2019 to ensure adequate liquidity.

29.1 Sensitivity of short-term loans and borrowings

At 31 December 2019, RATP had short-term debt outstanding in the form of commercial paper of €1,279 million, of which €90 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.

The short-term debt, primarily at a fixed rate, finances short-term assets which are in turn indexed to monetary rates. The Group has little exposure to interest rate volatility.

29.2 Sensitivity of long-term loans and borrowings

Effect on interest expense

At present, 93% of long-term borrowings (bonds, corporate savings plan or Île-de-France loan) bear fixed rate interest.

Total unhedged debt (amortised cost)	31/12/2019	31/12/2018
CHF bonds (in millions of euros)		413
Floating rate		
Fixed rate	100.00%	100.00%
EUR bonds (in millions of euros)	4,972	4,385
Floating rate		
Fixed rate	100.00%	100.00%
Île-de-France long-term bonds (in millions of euros)	146	159
Floating rate	100.00%	100.00%
Fixed rate		
Corporate savings plan (in millions of euros)	249	266
Floating rate	100.00%	100.00%
Fixed rate		
Total (in millions of euros)	5,366	5,223
Fixed rate	93%	92%
Floating rate	7%	8%
Total hedged debt	31/12/2019	31/12/2018
Total debt (nominal amount) (in millions of euros)	5,366	5,223
Floating rate	395	426
Fixed to floating swaps	0	0

Interest expense on bonds amounted to €122 million in 2019. Since bonds bear interest at fixed rates, the interest expense paid by the Group is not exposed to interest rate increases.

29.3 Offsetting agreements

% fixed-rate debt

The Group's financial assets and liabilities are not offset in the balance sheet, except for assets and liabilities relating to the US lease transactions (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:

	Carrying amount of derivatives assets	Carrying amount of derivatives liabilities	Fair value of financial collateral	Net exposure
Interest rate and foreign exchange derivatives	5,100	(44,913)		(39,813)
Loans related to lease terminations		(29,781)	34,700	4,919
Exchange rate hedges (lease deposits)		(31,180)	25,900	(5,280)

93%

92%

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 (the derivative instruments not designated as hedges are revalued in the balance sheet in with an offset to income).

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 the income statement. 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.

Changes in the fair value 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.

The Group has chosen to adopt the "cost of hedging" approach offered by IFRS 9, which enables it to linearly spread in profit and loss the deferral/offset of foreign exchange derivatives used to hedge financings.

Hedge effectiveness

With the transition to IFRS 9, the Group is still documenting the effectiveness of its hedges, establishing that an economic relationship exists between the base transaction and the hedging transaction, regardless of whether they offset each other, in part or entirely, and that the strategy implemented makes it possible to cover the risks incurred.

30.1 Classification of derivative financial instruments

	31/12/2018					
	Assets non-current	Assets current	Total assets	Liabilities non-current	Liabilities current	Total liabilities
Cash flow hedge	14,072	104,702	118,774	19,143	3,553	22,696
Fair value hedge		2,244	2,244	23,674	35	23,709
No hedging		673	673		535	535
TOTAL	14,072	107,619	121,691	42,817	4,123	46,940

	31/12/2019					
	Assets non-current	Assets current	Total assets	Liabilities non-current	Liabilities current	Total liabilities
Cash flow hedge	123	400	524	7,243	261	7,504
Fair value hedge		161	161	31,182	3,761	34,943
No hedging		2,763	2,763		2,970	2,970
TOTAL	123	3,324	3,448	38,425	6,992	45,417

30.2 Maturity of derivative instruments (maturity, notional amount, currency)

As at 31 December 2018

	Classification			Maturity of notional amount			
	Total	CFH	FVH	Trading	<1 year	1 to 5 years	+5 years
Exchange rate hedges (notional)							
Cross currency swaps	407,783	297,163	53,826	56,797	297,163		110,620
Forex swaps	91,307		65,815	25,492	91,307		
Interest rate hedges (notional)							
Floating for fixed swaps	290,652	290,652		58,600	310	14,711	275,631
Commodity hedges							
Swaps Position ULSD 10 ppm (in thousands of euros)	10,767	10,767			7,911	2,856	

As at 31 December 2019

	Classification			Maturity of notional amount			
	Total	CFH	FVH	Trading	<1 year	1 to 5 years	+5 years
Exchange rate hedges (notional)							
Cross currency swaps	106,818		52,865	53,953		53,953	52,865
Forex swaps	380,807		380,807		380,807		
Interest rate hedges (notional)							
Floating for fixed swaps	139,832	88,766		51,066	835	124,658	14,339
Commodity hedges							
ULSD 10 ppm swaps position (in thousands of euros)	9,779	9,779			6,047	3,732	

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 at 31 December 2019 are:

- either derivative instruments (cross currency swaps) that cover the deposits negotiated when setting up the US leases and restructured in July 2013;
- foreign exchange swaps that cover the purchase of commercial paper issued in US 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

Cash flow hedges at 31 December 2019 were fixed interest rate swaps against Euribor: RATP pays a fixed rate and receives a Euribor rate on an 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 material.

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 market data.

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 financial instruments is calculated on the basis of market values estimated using the valuation models and methods commonly used on the markets or using external valuations provided by counterparties:

- 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 or 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 market data (level 3)

The assets and liabilities measured at fair value using level 3 inputs are non-consolidated securities.

31.1 Fair value hierarchy of financial instruments

As at 31 December 2018

	Carrying amount in		Levels of	fair value hierarc	hy
	the balance sheet	Fair value	Level 1	Level 2	Level 3
Measurement of assets at fair value					
Non-consolidated securities	48,437	48,437			48,437
Derivative financial instruments	121,691	121,691		121,691	
Financial concession assets	3,980,004	3,980,004		3,980,004	
Other financial assets	272,041	297,600	126,152	171,448	
Cash and cash equivalents	1,075,501	1,075,501	521,375	554,126	
Assets held for sale					
Measurement of liabilities at fair value					
Financial liabilities	6,663,087	7,111,136	5,233,636	1,877,500	
Derivative financial instruments	46,940	46,940		46,940	

As at 31 December 2019

	Carrying amount in		Levels of	hy	
	the balance sheet	Fair value	Level 1	Level 2	Level 3
Measurement of assets at fair value					
Non-consolidated securities	52,027	52,027			52,027
Derivative financial instruments	3,448	3,448		3,448	
Financial concession assets	3,836,180	3,836,180		3,836,180	
Other financial assets	292,629	302,060	129,993	172,067	
Cash and cash equivalents	1,544,040	1,544,040	121,210	1,422,830	
Assets held for sale					
Measurement of liabilities at fair value					
Financial liabilities	7,012,940	7,856,415	5,779,818	2,076,597	
Derivative financial instruments	45,417	45,417		45,417	

31.2 Transfers between levels of 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.

32 — Information per operating segment

In accordance with the provisions of IFRS 8, the segments presented are as follows:

- the "Infrastructure management" (IM) 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 Îlede-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 invoice 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 2019

	Infrastructure management	Transport operations	Eliminations	Total
External revenue	113,583	5,590,498		5,704,082
Inter-segment revenue	906,738	365,071	(1,271,809)	
Revenue	1,020,321	5,955,570	(1,271,809)	5,704,082
EBITDA	620,384	213,112		833,496
Operating income	363,671	(44,418)		319,253
Depreciation/amortisation	(256,504)	(222,819)		(479,323)

As at 31 December 2018

	Infrastructure management	Transport operations	Eliminations	Total
External revenue	4,261	5,558,599		5,562,861
Inter-segment revenue	880,427	325,954	(1,206,381)	
Revenue	884,689	5,885,554	(1,206,381)	5,562,861
EBITDA	509,516	336,730		846,246
Operating income	263,021	188,251		451,273
Depreciation/amortisation	(245,941)	(149,719)		(395,660)

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 2019

	Infrastructure management	Transport operations	Total
Property, plant and equipment and intangible assets, net	6,106,533	1,725,353	7,831,886
Investment grants	2,585,585	4,922,142	7,507,727
Acquisition of property, plant and equipment and intangible assets	678,023	949,149	1,627,172
Purchase of concession assets		209,748	209,748
Total assets	6,585,595	9,849,489	16,435,084

As at 31 December 2018

	Infrastructure management	Transport operations	Total
Property, plant and equipment and intangible assets, net	5,045,340	2,047,828	7,093,168
Investment grants	2,502,054	4,469,944	6,971,998
Acquisition of property, plant and equipment and intangible assets	630,466	799,999	1,430,465
Purchase of concession assets		224,845	224,845
Total assets	5,456,249	9,709,453	15,165,702

33 — Guarantees

33.1 Guarantees given

	31/12/2019			31/12/2018		
	Epic RATP	Other	Total	Epic RATP	Other	Total
Guarantees	288,283	684,874	973,157	321,838	566,953	888,791
Of which:						
non-profit organisations or others	12,757	684,874	697,631	21,404	566,953	588,357
employee benefits	109,864		109,864	123,348		123,348
leasehold transactions	165,662		165,662	177,086		177,086
TOTAL	288,283	684,874	973,157	321,838	566,953	888,791

33.2 Guarantees received

	31/12/2019			31/12/2018		
	Epic RATP	Other	Total	Epic RATP	Other	Total
Guarantees	343,842	4,681	348,523	343,014	4,767	347,781
TOTAL	343,842	4,681	348,523	343,014	4,767	347,781

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 €3,263 million at 31 December 2019. These investments are mainly financed through staged grants paid in accordance with progress of the projects and the arrangements governing compensation payable for contracts with Île-de-France Mobilités.

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 made in the Notes to the financial statements.

French 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 ille-

gal State aid, on the grounds of the failure to report them to the European Commission. For RATP Dev subsidiaries, 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.

On 27 November 2015, a judgement 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 and thus reduce the previously calculated base.

The European Commission, in its decision SA 26763 2014/C issued on 2 February 2017, confirms the State aid qualification of the subsidy system set-up by the Region (national procedure in progress), followed by Île-de-France Mobilités (for the later period), recognising at the same time that such aid is in line with the treaty. The Commission notes the illegal nature of this aid because of the absence of prior notification which exposes their beneficiary to having to repay the corresponding bank interest for the period when this aid was granted, i.e. a little more than €4 million, on the basis of the base initially quoted.

The Court of the European Union, referred to on 16 May 2017 by the main operators united within the Optile association, including RATP Dev (via Céobus), and by the Île-de-France region, rejected the operators' appeal by a decision dated 12 July 2019 (T-330/17). The Court confirmed the illegality of the aid granted in the absence of notification thereof by the Île-de-France region. Without prejudice to the merits of the decision at national level, the Court also rejected the plea relating to the calculation of the limitation period, as it considers that it is for the national courts alone to order the beneficiaries of the aid to pay the illegality interest for the period during which they were illegally paid.

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 Île-de-France Mobilités as beneficiary in fine of the State aid 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.

Urssaf audit

In the first half of 2018, RATP was audited by Urssaf for the years 2015 to 2017. The main differences identified in the audit relate to the calculation of the basis of the "family allowance" contributions of RATP agents.

An adjustment notice was sent to RATP by the Administration on 28 March 2019 for an amount of €46.9 million (including a surcharge for late payment of €4.3 million). The principal amount, i.e. €42.6 million, was paid by the company on 23 April 2019 as a precautionary measure. This amount was capitalised by RATP in the balance sheet assets as a receivable from Urssaf.

RATP formally disputed the merits of the arguments developed by Urssaf. It referred to the arbitration committee on 21 May 2019. At the end of the two-month period, the committee did not give an opinion, which amounts to an implicit decision of rejection. RATP filed an appeal with the Regional Court (*tribunal de grande instance*) on 21 October 2019 to assert its position. No provisions were recognised in the financial statements as at 31 December 2019.

35 — Information on related parties

35.1 Transactions with related parties

RATP is an industrial and commercial public institution that is fully owned by the French State. Consequently, RATP is related, within the meaning of IAS 24, to 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.

RATP's transactions with the French State and local authorities

	31/12/2019	31/12/2018
Île-de-France Mobilités contribution	2,058,177	2,001,375
Local council contribution to loss-making services	16,457	18,320
Investment grants called (State, Île-de-France Mobilités, Île-de-France region, other)	757,305	683,602
Île-de-France region loans contracted		
Île-de-France region loans repaid	18,509	20,309
State and local authority receivables	398,713	390,709
Île-de-France Mobilités receivables (excluding IFRIC 12)	222,945	44,104
State and local authority liabilities	109,323	114,876
Île-de-France Mobilités liabilities	260,860	80,401
Île-de-France local authority loans and borrowings	168,830	187,340

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.

	31/12/2019	31/12/2018
Short-term benefits excluding		
employer contributions(1)	2,878	2,977

(1) Including gross salaries, bonuses, profit sharing and benefits in kind.

Other benefits were not material.

36 — Statutory Auditors' 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 – loi de sécurité financiaire), details of the fees charged for the audit of the consolidated and individual financial statements of the Group are provided below:

	31/12/2019	31/12/2018
KPMG	1,122	921
Mazars	776	730
Other	536	723
Statutory audit ⁽¹⁾	2,435	2,373
KPMG	27	74
Mazars	27	20
Other		
Services related to statutory audit	54	94
KPMG	84	32
Mazars		
Other	399	597
Other services	484	629

⁽¹⁾ The amounts are recurrent fees paid to the Statutory Auditors for the mission and for any additional assignments related to their mission.

37 — Post-balance sheet events

Nil.

38 — Other information

Information on Brexit

RATP Group operates in the United Kingdom through some of RATP Dev and Systra's operations.

If the exit of the United Kingdom from the European Union resulted in a decline in growth, it could have an impact on household consumption, the level of investment in transport infrastructure and on the financial pressure of the authorities on transport operators.

The change in the pound sterling exchange rate would have a limited impact on the profitability of the businesses, whose revenues and costs are mainly generated in pounds sterling, except for the purchase of diesel, which is expressed in US dollars. It would have an impact on the translation of financial statements in euros in the consolidated financial statements of RATP Group.

A tightening of the immigration policy could impact the Group's non-British employees working in the United Kingdom.

39 — List of Group companies

	Country	% control	% interest	Method	Comments
Transport division					
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	
Autocars Finand Parmentier	France	100.00	100.00	FC	
Autoline Toscane	Italy	100.00	100.00	FC	
Assetco Toscana SRL	Italy	100.00	100.00	FC	Newly consolidated in 2019
Aventour	France	100.00	100.00	FC	
Bath Bus company	England	100.00	100.00	FC	
Bombela Operating company	South Africa	63.42	63.42	FC	
Cambrésis Bus	France	96.17	96.17	FC	
CAMCO	Saudi Arabia	80.00	80.00	FC	
Cars Dunois	France	100.00	100.00	FC	
Cars Perrier	France	100.00	100.00	FC	
Casa Tram	Morocco	100.00	100.00	FC	
Céobus	France	100.00	100.00	IG	
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
Compagnie Francilienne de Transport et de la Mobilité	France	100.00	100.00	FC	
CSR	France	100.00	100.00	FC	
СТВ	France	100.00	100.00	IG	
СТСМ	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	
CTPL	France	90.00	90.00	FC	
CTVH	France	100.00	100.00	FC	
CTVMI	France	100.00	100.00	FC	
СТҮ	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	
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	

	Country	% control	% interest	Method	Comments
FlexCité 93	France	85.60	85.60	FC	
FlexCité 94	France	97.00	97.00	FC	
FlexCité 95	France	85.60	85.60	FC	
FlexCité TAD	France	100.00	100.00	FC	
Gem'Bus	France	100.00	100.00	FC	
Gest SpA	Italy	100.00	100.00	FC	
HR Richmond Ltd	England	100.00	100.00	FC	
HelvéCIE SA	Switzerland	100.00	100.00	FC	
Hello Paris	France	50.00	50.00	EM	Newly consolidated in 2019
Hello Paris Participation	France	50.00	50.00	EM	Newly consolidated in 2019
Hello Paris Services	France	50.00	50.00	EM	Newly consolidated in 2019
Hong Kong Tramway	Hong Kong	50.50	50.50	FC	
Hong Kong Tramway Engineering	Hong Kong	50.00	50.00	EM	
RATP Smart Systems	France	100.00	100.00	FC	
Ixxi Techside	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	
London United Busways	England	100.00	100.00	FC	
London Sovereign	England	100.00	100.00	FC	
France RATP Maintenance Services (formerly Matem)	France	100.00	100.00	FC	
RATP Dev USA Inc. (formerly McDonald Transit Associates)	USA	94.29	94.29	FC	
Metrolab	France	50.00	50.00	Other	Joint venture. Consolidated by percentage interest on a line-by-line basis
MétroLink	England	100.00	100.00	FC	on a tine-by-tine basis
Mobicité	France	100.00	100.00	FC	
Mobizen	France	20.00	20.00	EM	
Moulins Mobilité	France	100.00	100.00	FC	
Mumbay	India	31.50	31.50	EM	
Navocap	France	100.00	100.00	FC	
Odulys	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	
RKH Qitarat LLC. (formerly Qatar Metro)	Qatar	32.50	32.50	EM	
RATP Capital Innovation	France	100.00	100.00	FC	
RATP Dev Asia Pacific PTE Ltd	Singapore	100.00	100.00	FC	
RATP Dev Canada	Canada	100.00	100.00	FC	
RATP Dev France Investissement	France	100.00	100.00	FC	
RATP Dev France Invest	France	100.00	100.00	FC	
RATP Dev Italia	Italy	100.00	100.00	FC	
IVALL DEVILALIA	italy	100.00	100.00	10	

	Country	% control	% interest	Method	Comments
RATP Dev Lorient Agglomération	France	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	
RATP Dev UK	England	100.00	100.00	FC	
RATP Dev USA LLC	USA	100.00	100.00	FC	
RATP Dev Rails	France	100.00	100.00	FC	Newly consolidated in 2019
RATP Dev Angers	France	100.00	100.00	FC	Newly consolidated in 2019
RATP Dev Brest	France	100.00	100.00	FC	Newly consolidated in 2019
RATP Dev Saint-Malo	France	100.00	100.00	FC	Newly consolidated in 2019
RATP Dev Creil	France	100.00	100.00	FC	Newly consolidated in 2019
RATP Développement	France	100.00	100.00	FC	
RATP do Brasil	Brazil	100.00	100.00	FC	
RATP Coopération	France	100.00	100.00	FC	
RATP Paris Région	France	100.00	100.00	FC	Newly consolidated in 2019
RATP Participations	France	100.00	100.00	FC	Newly consolidated in 2019
Citio	France	92.00	92.00	FC	
RDGS	England	100.00	100.00	FC	
RDMT – DC	USA	98.86	98.86	FC	
RDMT Tucson	USA	98.86	98.86	FC	
RDK SAS	France	50.00	50.00	EM	
RDK LLC (Educational City)	Qatar	50.00	50.00	EM	
RDSL Urban NY	USA	100.00	100.00	FC	
RMS	USA	100.00	100.00	FC	
RRS	USA	100.00	100.00	FC	
SCI Foncière RD	France	100.00	100.00	FC	
SCI Sofitim	France	50.00	50.00	FC	
Selwyns	England	100.00	100.00	FC	
Setim	France	86.75	86.75	FC	
Setim Mexico	Mexico	86.88	86.88	FC	
Setram	Algeria	49.00	49.00	FC	
SLIDE	England	100.00	100.00	FC	
Société des lignes touristiques	France	100.00	100.00	FC	
Société des transports interurbains Centre	France	100.00	100.00	FC	
Société des transports urbains de Bourges	France	100.00	100.00	FC	
Société des transports urbains de Vierzon	France	100.00	100.00	FC	
Société d'exploitation des lignes touristiques	France	100.00	100.00	FC	

	Country	% control	% interest	Method	Comments
Saint-Quentin-en-Yvelines Bus	France	89.52	89.52	FC	
STD de la Marne	France	100.00	100.00	FC	
STILE	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	England	100.00	100.00	FC	
TP2A	France	51.00	51.00	FC	
Tram di Firenze	Italy	14.53	14.53	EM	
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	
Voyages Taquet	France	100.00	100.00	FC	
VTCL Veolia Transport Chine	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
RDTI (formerly VTR India)	India	50.00	50.00	EM	Joint venture
RDTK (formerly VTR Korea)	Korea	50.00	50.00	EM	Joint venture
Wizway Solution	France	25.00	25.00	EM	
Engineering division					
Systra group	France	43.40	43.40	EM	
Real Property and Telecoms division					
RATP Travel Retail	France	100.00	100.00	FC	
SADM	France	100.00	100.00	FC	
RATP Real Estate	France	100.00	100.00	FC	
SEDP2		400.00	100.00	FC	
JLDI Z	France	100.00	100.00	FC	
RATP Connect	France France	100.00	100.00	FC	

Financial statements

Statutory Auditors' report on the financial statements 159

EPIC balance sheet 162

EPIC income statement 163

Notes to the financial statements 164

Statutory Auditors' report on the financial statements

Year ended 31 December 2019

To the Board of Directors of RATP.

Opinion

In the performance of the assignment entrusted to us by the Commissioner of State Holdings, we have audited the accompanying financial statements of the Régie autonome des transports parisiens (hereinafter "RATP" or "EPIC") for the year ended 31 December 2019.

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 2019.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We consider that the elements we have collected are appropriate and sufficient for basing our opinion.

Our responsibilities under those standards are further described in the "Statutory Auditors' responsibilities for the audit of the financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us, for the period from 1 January 2019 to the date of our report and we specifically did not provide any prohibited non-audit services referred to in article 5-(1) of regulation (EU) No. 537/2014 or in the French code of ethics (*Code de déontologie*) for Statutory Auditors.

Justification of our assessments - Key audit matters

In accordance with the requirements of articles L. 823-9 and R. 823-7 of the French commercial code (*Code de commerce*) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgement, were of most significance in our audit of the financial statements of the financial year, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the financial statements. We express no opinion on items of these annual financial statements taken separately.

Measuring intangible assets and property, plant and equipment of the State-owned industrial and commercial public utility (EPIC)

Identified risk

As at 31 December 2019, intangible assets and property, plant and equipment amounted to €18.4 billion (i.e. €11.1 billion, net of investment grants) and represented approximately 83% of total assets. They are held by EPIC's two CGUs: Transport operations (TO) and Infrastructure management (IM).

RATP's economic and management model is evolving in the context of negotiating the new contractual arrangement with Île-de-France Mobilités for the period 2021-2025, from the beginning of the Regulatory Transport Authority's (ART) control over IM from 2020 and opening of transport markets to competition from the beginning of the financial year.

Impairment tests are performed by management to ensure that the carrying amount of EPIC's assets is not greater than their recoverable value and does not present a risk of impairment. These impairment tests are carried out according to the methods set out in Note 1.1.5 of the notes to the consolidated financial statements, based on IM budgets and TO's fully-owned assets. These budgets include assumptions of contract renewals leading to financial performance identical to that of the current agreement. The margins for manoeuvre observed remain very sensitive to the economic assumptions and discount rates used. Any unfavourable change in expected profitability is likely to significantly affect recoverable value.

In addition, management justifies the absence of an impairment indicator for returnable and reversionary assets from the TO due to legal and contractual provisions.

We deemed the valuation of EPIC's assets to be a key audit matter because of their significant amounts in EPIC's financial statements and the method of determining the recoverable value, which is based on management's judgement, particularly with regard to estimates of future cash flows or discount rates used.

Audit response

We assessed management's approach in the evolving economic, legal and regulatory context summarised above and the compliance of this approach with the accounting standards in force. We assessed the company's models and calculations particularly by:

- comparing the discount rates used by the CGUs with our internal databases;
- assessing the quality of the process for drawing up and approving budgets and forecasts;
- comparing growth in revenue and investment over the term of the Île-de-France Mobilités agreement with the contractual conditions for the years 2019 and 2020;
- assessing the consistency of information and other assumptions used in these models with the budgets and forecasts made by management and presented to the Board of Directors and, on the other hand, with our knowledge of the sector and the specificities of the Île-de-France Mobilités agreement acquired, in particular, during interviews with the members of the Executive Committee;
- verifying the justification and documentation of the market value of qualified returnable and reversionary assets;
- controlling the sensitivity analysis of the recoverable amount carried out by management to the changes in the main assumptions considered.

We verified that the financial information given in the accompanying notes was appropriate.

Specific verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French laws and regulations.

We have no matters to report as to the fair presentation and consistency with the financial statements of the information given in the Board of Directors' management report and other documents provided to the members of the Board of Directors with respect to the financial position and the financial statements.

We certify that the financial statements for the year ended 31 December 2019 are fairly presented and consistent with the information on payment periods presented in article D. 441-4 of the French commercial code (*Code de commerce*).

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

The firms Mazars and KPMG were appointed as Statutory Auditors of RATP by the Commissioner of State Holdings on 26 March 2015.

As at 31 December 2019, the firms Mazars and KPMG were in fifth year of their uninterrupted engagement.

Responsibilities of management and those charged with governance for the (annual) financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles and for such internal control as management deems necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern accounting convention unless it is expected to liquidate the company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems and, where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The Board of Directors is responsible for preparing the financial statements.

Statutory Auditors' responsibilities for the audit of the annual financial statements

Objectives and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in article L. 823-10-1 of the French commercial code (*Code de commerce*), our statutory audit does not include assurance on the viability of the company or the quality of management of the affairs of the company.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditor exercises professional judgement throughout the audit. And furthermore:

- identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks and obtains audit evidence considered to be sufficient and appropriate to provide a basis for its opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the financial statements;
- assesses the appropriateness of management's use of the going concern accounting convention and, based on the audit evidence obtained, whether a material uncertainty exists relating to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of its audit report. However,

future events or conditions may cause the company to cease to continue as a going concern. If the Statutory Auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;

 evaluates the overall presentation of the financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgement, were of most significance in the audit of the financial statements of the financial year and which are therefore the key audit points.

We also provide the Audit Committee with the declaration provided for in article 6 of regulation (EU) No. 537-2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by articles L. 822-10 to L. 822-14 of the French commercial code (Code de commerce) and in the French code of ethics (Code de déontologie) for Statutory Auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence and the related safeguards.

The Statutory Auditors

Paris-la Défense, 10 March 2020

KPMG Audit

Mazars

Department of KPMG SA

Stéphanie Millet Partner Lionel Gotlib

Erwan Candau Partner



EPIC balance sheet

Assets

			31/12/2019		31/12/2018
In thousands of euros	Notes	Gross	Depreciation, amortisation and provisions	Net	Net
Intangible assets	2	1,178,271	(593,442)	584,829	547,420
Property, plant and equipment	2	31,181,138	(13,373,229)	17,807,908	17,085,320
Financial assets	3	960,588	(48,961)	911,627	779,486
Fixed assets		33,319,997	(14,015,633)	19,304,365	18,412,226
Inventories and work in progress	4	293,131	(51,969)	241,163	210,033
Receivables	5	1,220,914	(4,599)	1,216,315	1,062,143
Marketable securities	6	1,326,332	(1)	1,326,331	868,711
Cash and cash equivalents		128,343		128,343	180,871
Current assets		2,968,720	(56,569)	2,912,152	2,321,757
Loan transaction costs		2,316		2,316	2,979
Bond redemption premiums		9,755		9,755	10,161
Unrealised translation losses		5,146		5,146	4,538
TOTAL ASSETS		36,305,934	(14,072,201)	22,233,734	20,751,661

Equity and liabilities

In thousands of euros Notes	31/12/2019	31/12/2018
Reserve for assets allocated to RATP	250,700	250,700
Revaluation surplus	204,667	204,840
Capital endowment	433,367	433,367
Reserves	294,699	294,699
Retained earnings	3,538,904	3,291,323
Net income for the period (surplus or loss)	131,542	247,581
Net equity	4,853,880	4,722,510
Regulated provisions	641,424	585,558
Investment grants	7,307,799	6,813,396
Equity 7	12,803,103	12,121,464
Provisions for contingencies and expenses 8	266,266	244,573
Financial liabilities 9	6,850,374	6,386,854
Taxes and payroll-related payables	608,755	711,494
Other liabilities 10	1,700,104	1,282,733
Unrealised translation gains	5,131	4,544
TOTAL EQUITY AND LIABILITIES	22,233,733	20,751,661

EPIC income statement

In thousands of euros Notes	31/12/2019	31/12/2018
Revenue 11	4,826,600	4,821,370
Other income	956,559	740,249
Income used to offset depreciation and amortisation expenses	244,709	248,331
Revenue and other income	6,027,867	5,809,950
Energy	(210,027)	(210,458)
Cost of leased tracks	(31,352)	(31,308)
User rights payable	(20,921)	(20,364)
Equipment, supplies and other external expenses	(1,395,700)	(1,132,807)
Tax, duties and other payables	(313,443)	(300,168)
Payroll costs 12	(2,725,344)	(2,713,473)
Wages and salaries	(1,867,196)	(1,870,076)
Payroll-related costs	(803,725)	(790,377)
RATP employee benefit plan cost, net	(5,513)	(567)
Profit-sharing	(48,910)	(52,452)
Depreciation, amortisation and provisions	(1,017,631)	(982,743)
Other expenses	(26,249)	(25,997)
Operating income	287,201	392,632
Financial income	54,523	96,949
Financial expenses	(177,592)	(225,841)
Net financial expense 13	(123,068)	(128,891)
Ordinary income	164,133	263,741
Non-recurring income	76,084	71,817
Non-recurring expenses	(115,581)	(95,324)
Extraordinary income and expense 14	(39,497)	(23,507)
Corporate income tax 15	6,907	7,347
NET INCOME	131,542	247,581



Notes to the financial statements

Year ended 31 December 2019

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. Its head office is located at 54, quai de la Rapée, 75012 Paris.

The aim of RATP is primarily to run a public transport service in Îlede-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;
- defined the framework governing RATP's compensation for managing the infrastructure and operating the services, ensuring an appropriate return on capital employed.

The Île-de-France transport services are defined by the Île-de-France transport authority (whose common name is Île-de-France Mobilités). RATP's activity as an operator is governed by multi-year agreements with Île-de-France Mobilités. Under these agreements, RATP undertakes to provide a transport service defined in terms of quantity and quality and receives compensation based on the direct revenues and flat-rate contributions paid by Île-de-France Mobilités.

Pursuant to the French law of 3 June 2010 on Greater Paris transport, integrated by ministerial order into the French transport code (*Code des transports*) of 28 October 2010, RATP has held separate accounting records for metro and RER Infrastructure management (IM) activities and public passenger Transport operations (TO) since 1 January 2012. A balance sheet and income statement are prepared for each activity in the notes to the parent company financial statements (Note 22).

The law of 24 December 2019 on Mobility (LOM) established regulation of RATP Infrastructure management activities and safety by the Transport Regulatory Authority (ART). The terms of this regulation should be specified by decree in the first half of 2020.

With regard to the technical management activity of the Greater Paris public transport network mentioned in articles 20 and 20-2 of law No. 2010-597 of 3 June 2010 relating to Greater Paris, this regulation will result in the obligation to set up a confidential information management plan, validated by ART, which must ensure that the RATP does not benefit, by virtue of its role as technical manager, from information that is likely to give it an advantage in the designation of the transport operator by Île-de-France Mobilités. In addition, RATP will publish a reference document from the technical manager, presenting the measures planned to ensure transparent, fair and non-discriminatory treatment between transport operators. This document will be subject to ART's approval.

For the Infrastructure management activity of the metro and RER network and the technical management activity of the Greater Paris network, RATP's compensation in the multi-year agreement provided for in article L. 2142-3 of the transport code will subject to ART's approval. For this, six months before the expiry of the current agreement, RATP must submit the envisaged compensation trajectory to it. ART will consult Île-de-France Mobilités before deciding and, in the absence of assent one month before the expiry of the multi-year agreement, will have to fix the provisional fixed compensation that Île-de-France Mobilités will pay RATP. The precise terms of calculation of this compensation and the transmission to ART will be specified by decree in the first half of 2020.

This law also provides for the creation of two new separate accountable establishments:

- the Greater Paris Infrastructure Manager (GIGP), for the technical management activity of the Greater Paris public transport network mentioned in articles 20 and 20-2 of law No. 2010-597 of 3 June 2010 relating to the Greater Paris;
- RATP security (SUR) activities, from 1 January 2021. The LOM confirms the monopoly of this security activity on the historic rail network and extends it to the Greater Paris Express network.

In 2020, ART will have to make a decision on the rules of separation between different accounting establishments within RATP in order to ensure the absence of cross-subsidies between different establishments.

The financial statements of the parent company RATP are included in the consolidated financial statements of RATP Group.

The financial statements as at 31 December 2019 were approved by the Board of Directors at their meeting on 6 March 2020.

1 — Accounting principles, rules and methods

RATP's accounting plan was approved by the inter-ministerial order of 21 March 1985 and the French national accounting board (Conseil national de la comptabilité). The customised plan 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.

1.1 Property, plant and equipment and intangible assets

1.1.1 Ownership regime covering capitalised assets

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 Mobilités since 1 January 2010. Île-de-France Mobilités will take possession of the assets once the operating rights expire. Implementation decree No. 2011-320 provides for the purchase by Île-de-France Mobilités 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, Îlede-France Mobilités 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.

Capitalised assets are recognised according to their ownership regime:

	Infrastructure management		Transport operations	
Type of assets	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: • bus depots; • equipment, etc.	Assets allocated for administrative, social and training purposes.
Ownership regime	RATP owns these assets.	France Mobilités has owned these assets since 1 January 2010. RATP retains control. Ownership of the assets will revert to Île-de-France Mobilités at the end of the agreement.	RATP owns these assets. Île-de-France Mobilités 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 out the arrangements for the compensation payable by Île-de-France Mobilités to RATP for the assets.	The compensation principles and arrangements apply for the duration of the Île-de-France Mobilités agreement 2016-2020.	
Compensation arrangements upon expiry of operating rights	Not applicable.	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 Île-de-France Mobilités-RATP agreement provides for either the repossession of the assets at a value of zero for assets transferred to RATP as at 1 January 2010, or reversal at their carrying amount, net of grants, for other assets.	Not applicable.

1.1.2 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.

1.1.3 Property, plant and equipment

RATP's capital assets as well as the returnable (concession) assets provided by Île-de-France Mobilités are recorded in the balance sheet at their historical cost (acquisition or production cost). Their valuation takes into account the revaluations made in 1963 on the basis of 1959 and in 1978 on the basis of 1976.

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.

Certain assets are funded by investment grants.

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.

Provisions for impairment 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 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.

1.1.4 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 lives
Building shell and brickwork	70 to 100 years
Building fixtures and fittings	6 to 30 years
Railway infrastructure	Useful lives
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 signalling and assisted driving systems	Useful lives
Automated train operating system (SAET)	5 to 35 years
Automated driving system	15 to 30 years
Track signalling	10 to 40 years
Rolling stock	Useful lives
Rolling stock (rail)	20 to 40 years
Rolling stock (bus)	4 to 10 years
Company cars	5 years
Plant equipment, fixtures and fittings	Useful lives
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
Other equipment and furniture	5 to 30 years
Equipment and tooling	2 to 15 years

1.1.5 Impairment of intangible assets and property, plant and equipment

The accounting principles 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 out ownership regimes and specified what happens to these 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 law of 24 December 2019 on mobility orientation determined the conditions for the regulation of Infrastructure management activities by the Transport Regulatory Authority (ART). It provides for the compensation of Infrastructure management activities based on the return on capital employed.

The tests were carried out based on the value of the assets as at 1 January 2019. 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 recoverable value of returnable and reversionary assets carried by the Transport operations activities corresponds to their market value.

The recoverable amount of fully-owned assets of the Transport operations and the Infrastructure management assets corresponds to their value in use, which is determined on the basis of future cash flows, net of tax, which have been forecast.

In the context of negotiating a new RATP-Île-de-France Mobilités agreement for the period 2021-2024, and implementing the regulation of Infrastructure management activities with the determination of a new method of compensation, the data considered is as follows:

- for 2019: the income for the financial year ended was taken into account, excluding the exceptional effect of the strike against the pension reform. This financial year includes the allocation of income corresponding to the charges for occupying public space (advertising revenues, commercial rents and telecom charges), which cannot be separated from the infrastructure to Infrastructure management activities, while they were allocated to Transport operations activities until 2018;
- for 2020: the 2020 budget based on the financial provisions of the agreement between Île-de-France Mobilités and RATP for 2016-2020, revised as required by changes to interest rates;
- beyond 2020: the conditions of the current contract were renewed indefinitely, without taking into account the opening of the market to competition. For IM, a standard investment for renewal was estimated.

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.

	CGUs			
		Transport operations activity Fully-owned assets		
Method for determining the recoverable value	Value in use	Value in use		
Discount rate	4.6%	5.2%		
Perpetual 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.

The impairment tests performed on the Infrastructure management and Transport operations (fully-owned assets) CGUs did not reveal any impairment losses. Consequently, no impairment losses were recognised in the consolidated financial statements for the financial year.

Sensitivity tests were performed to confirm the results of the impairment tests. Based on the assets tested:

- a +0.2% change in discount rate for the IM CGU and +0.6% for the TO (fully-owned assets) CGU would equalise the recoverable value and net carrying amount of each CGU;
- a -0.2% change in terminal growth rate for the IM CGU and -0.4% for the TO (fully-owned assets) CGU would equalise the recoverable value and net carrying amount of each CGU;
- a change of +€10 million in investment renewals for the IM CGU and +€20 million for the TO (fully-owned assets) CGU would equalise the recoverable value and net carrying amount of the CGU.

1.2 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 subgroup and on the earnings outlook of the subsidiary or subgroup.

A provision for impairment is recognised, if the net asset value of the investment falls below its carrying amount.

1.3 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.

1.4 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.

1.5 Bond redemption premiums

The cost of bond redemption premiums is amortised on a straightline 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.

1.6 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 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. This allocation 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 financial year.

Tax-driven provisions relate:

- to the revaluation of depreciable assets performed in 1978 based on 1976 data. It is transferred to income in proportion to the depreciation recognised for the corresponding assets;
- to special depreciation methods practiced since 1 January 2016.

1.7 Loans and borrowings

Loans and borrowings are recorded on the balance sheet at their redemption value in euros.

1.8 Currency transactions

All financing-related currency transactions are fully hedged.

Currency balances denominated in foreign currencies are translated at yearend at the closing rate.

If the exchange rate at the reporting date 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. These unrealised gains and losses are offset, if necessary, by the revaluation of foreign exchange derivatives hedging these exposures.

If unrealised currency translation losses are recorded, a foreign exchange contingency provision is also recorded.

The revaluation of the foreign exchange component of cross currency swaps and foreign exchange swaps is classified in the balance sheet under the same heading as the underlying hedged.

1.9 Derivative financial instruments

RATP uses derivative financial instruments to manage its exposure to changes in interest rates and exchange rates (interest rate swaps, options, cross currency swaps, forward purchases and sales and foreign exchange swaps). Almost all the derivative instruments qualify for hedge accounting and are used to manage risk on debt.

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.

RATP may also need to use derivatives to manage the commodity risk. Unrealised gains and losses from hedges on future purchases of diesel fuel are deferred and recognised in the income statement when the hedged transaction is settled. As in 2018, no transactions were undertaken in the commodities markets in 2019.

As part of the centralised management of market risks, RATP contracted derivatives on behalf of the Group subsidiaries. Gains and losses realised on derivatives contracted from bank counterparties are transferred back to the subsidiaries that have requested hedges.

1.10 Trade payables

Trade payables are recorded at face value. Supplier debts are reported under balance sheet assets.

1.11 Long-term employee benefits

RATP recognises provisions for long-term employee obligations including those relating to:

- commitments relating to payments of occupational injury and disease pensions. The RATP itself provides service for occupational injury and disease pensions to its active agents. 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 covered by a provision of €25 million. Benefits paid to non-current employees are part of off-balance sheet commitments;
- commitments relating to long-service rewards: €34 million;
- commitments relating to unemployment benefits: €9 million;
- commitments relating to long-term sick leave commitments:
 €2 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 0.75% at 31 December 2019 (1.75% at 31 December 2018).

The main actuarial assumptions are as follows:

	31/12/2019	31/12/2018	
Discount rate	0.75%	1.75%	
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 terms 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.

1.12 Lease 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 17.

1.12.1 Leasehold transactions

Between 1997 and 2002, RATP carried out a number of leaseholds transactions, granting the rights to use its assets through arrange-

ments that enable foreign investors to assume the economic ownership of the assets and thus amortise and benefit from a financial gain based on the difference in tax rates.

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 generally-accepted economic and accounting principles, a lease arrangement is not recognised as a sale prior to 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 represents an immediate reduction in the company's debts. It is recognised linearly under exceptional income, each year.

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 2019, there were five contracts 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 totalled €44 million at 31 December 2019;
- by holding US Treasury bonds. The deposits totalled €62 million at 31 December 2019.

1.12.2 Swedish lease transactions

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.

1.12.3 Leases

Île-de-France Mobilités and RATP have set up a finance lease arrangement for rolling stock for the T3, T5, T6, T7 and T8 tramway lines

In this transaction, RATP is the lessee; Île-de-France Mobilités reimburses the corresponding lease payments.

During the construction period, RATP paid the supplier. Once the tramways were delivered, RATP assigned them to a bank. The finance lease was then set up. Île-de-France Mobilités will take over the finance lease in 2029.

1.13 Recognition of revenue and other income

1.13.1 Revenues generated from the agreement with Île-de-France Mobilités

Transport revenue is made up of the following components:

- direct traffic revenues from transport users;
- Île-de-France Mobilités contributions:
 - "C1", a contribution to operating expenses intended to cover public service obligations. This contribution comprises three parts: a flat-rate contribution covering operating expenses that are not covered by revenues from transport users; a euro-for-euro contribution covering the amount of business, professional and property-related taxes and duties levied, and a contribution covering the difference between the indexing of the forecast direct revenues based on the methods used to calculate the flat-rate contribution and the impact on Île-de-France Mobilités' pricing decisions.
- "C2", a 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 Île-de-France Mobilités based on the actual direct revenues 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 (euro for euro reimbursement of the finance lease payments).

This transport revenue is provided for under the terms of the 2016-2020 multi-annual agreement concluded between Île-de-France Mobilités and RATP. The contributions are revalued every year by applying an indexing formula based on indices, pursuant to the provisions of the agreement.

The Île-de-France Mobilités-RATP agreement provides for penalties in the event of failure to implement the investment plan. Overall, RATP believes that since the beginning of the agreement, the investment plan has complied with the contractual clauses.

Public prices are set by Île-de-France Mobilités, the organising authority. They constitute a public service obligation with which RATP must comply.

1.13.2 Income used to offset amortisation and depreciation expenses

This item reflects income from reversals of investment grants and special revaluation provisions, recognised at the amortisation rate of the assets to which they relate.

1.14 Taxes and duties

Tax consolidation

In 2016, RATP chose to fiscally consolidate the French subsidiaries in which it had a stake exceeding 95%, as stipulated in article 223-A of the French General Tax Code (Code général des impôts).

There are 74 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 income is 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, 2018 and 2019, 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.

1.15 Payroll costs

RATP accounts separately for its transport business and its social security provider obligations.

This dual accounting system entails:

- for RATP's social security service obligations, income statements for each type of risk covered (health, industrial accidents and 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).

1.15.1 Presentation of payroll costs in the parent company financial statements

In order to ensure the comprehensibility 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".

Health insurance plan

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.

This decree brought the rules governing RATP's special health insurance scheme with the new rules resulting from the universal health protection system, both from the point of view of affiliation rules and financing rules.

Furthermore, the funding of the health insurance plan substituted the old system of bilateral compensation with an equilibrium allocation from the National Health Insurance Fund.

RATP has to distinguish between the expenses and income that fall under the common law scheme (PUMA) of the health insurance division and those that fall under the special scheme.

Regarding the statutory health insurance scheme, over and above expenses and income, an equilibrium allocation is paid or received by RATP in order to balance the profit or loss of the health insurance plan. The amount of this equilibrium allocation is determined at the end of each year.

Like social security organisations themselves, RATP's social security obligations include the following:

- the origin and amount of resources, in particular in terms of employer contributions;
- the amount of benefits paid to plan beneficiaries;
- management costs;
- the equilibrium allocation under the common law scheme of the health insurance division.

Work-related accident insurance and unemployment allowance plan

With regard to work-related accident and unemployment schemes, the plan's financial profit or loss is the difference between employer contributions and benefits paid.

Social security costs

The financial impacts of the PUMA statutory health insurance plan, non-PUMA health insurance plan, work-related accident insurance plan and unemployment allowance plan make up the "RATP employee benefit plan cost, net".

The breakdown of the financial items is presented in Note 12.

1.15.2 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, RATP receives a contribution to its health insurance fund from the CSG tax collected by URSSAF.

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 centres (Espaces santé), etc.;
- financial benefits, such as wages and salaries paid to employees on sick leave (daily indemnities), lump sums paid upon death, workrelated accident and disability pensions, etc.

1.16 French tax credit on payroll costs (CICE)

Until 2018, CICE was presented as a reduction in payroll costs, it was replaced by a reduction in social security contributions as of 1 January 2019.

In 2019, RATP assigned the Group's tax-consolidated CICE receivable for a net amount of €75 million to a credit institution that became the owner thereof.

1.17 Extraordinary 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 allow 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.

2 — Property, plant and equipment and intangible assets

Position and changes	Gross value at 1 January	Increase	Transfers	Decrease	Gross value at 31 December
Intangible assets					
Research and development costs	233,405		1,946		235,351
Lease rights	2,626				2,626
Other					
Software in use	635,591		67,484	(10,215)	692,859
Software in progress	211,036	98,683	(62,284)		247,435
TOTAL	1,082,658	98,683	7,145	(10,215)	1,178,271
Property, plant and equipment					
Land	620,150		2,937		623,087
Buildings	11,426,298		427,857	(117,553)	11,736,602
Buildings on land not owned	97,834		90		97,924
Technical plant, equipment and industrial tooling	5,362,890	3,735	321,104	(197,646)	5,490,083
Transport equipment	8,639,749	5,193	115,369	(71,520)	8,688,791
Other	201,567		15,974	(2,887)	214,654
Property, plant and equipment in progress	3,590,129	1,630,344	(890,476)		4,329,997
TOTAL	29,938,617	1,639,272	(7,145)	(389,606)	31,181,138
OVERALL TOTAL	31,021,275	1,737,955		(399,821)	32,359,409

Position and changes	Accumulated depreciation/ amortisation at 1 January	Increase additions	Decrease	Accumulated depreciation/ amortisation at 31 December
Intangible assets				
Research and development costs	72,084	8,131		80,215
Lease rights	1,568	35		1,603
Other	461,586	59,476	(9,437)	511,625
TOTAL	535,238	67,642	(9,437)	593,443
Property, plant and equipment				
Land	20,664	307		20,971
Buildings	4,936,119	271,634	(112,936)	5,094,817
Buildings on land not owned	92,084	1,260		93,344
Technical plant, equipment and industrial tooling	3,435,695	238,741	(168,665)	3,505,771
Transport equipment	4,224,565	344,782	(68,651)	4,500,696
Other	144,171	16,292	(2,832)	157,631
TOTAL	12,853,298	873,015	(353,083)	13,373,230
OVERALL TOTAL	13,388,536	940,657	(362,520)	13,966,673

3 — Financial assets

	31/12/2018	Increase	Decrease	31/12/2019
Equity investments	505,865	552,890	(421,996)	636,759
Receivables from equity investments	102,151	4,500	(6,049)	100,602
Leasehold deposit receivables	84,031	1,694	(958)	84,766
Swedish lease deposit receivables	40,440		(3,794)	36,645
1% social housing loans	39,245		(4,948)	34,297
Other financial receivables	7,755	10,803		18,558
TOTAL	779,486	569,887	(437,746)	911,627

4 — Inventories and work in progress

	31/12/2019	31/12/2018
Raw materials and consumables	261,132	252,551
Work in progress	31,999	8,945
Impairment	(51,969)	(51,464)
TOTAL	241,163	210,033

5 — Receivables

			31/12/2019			31/12/2018
				Asset liquidity		
			_	Maturit	ies	
	Amount gross	Provisions	Net amount	Less than 1 year	More than 1 year	Net amount
Advances and down payments to suppliers	5,885		5,885	5,885		1,979
Trade receivables and related accounts	115,439	(2,793)	112,647	112,647		127,484
Receivables from the State and other public authorities	587,315		587,315	587,315		421,650
Other	244,725	(1,806)	242,918	231,855	11,063	250,302
Lease receivables	199,992		199,992	157	199,835	216,650
Prepaid expenses	67,559		67,559	14,275	53,284	44,077
TOTAL	1,220,914	(4,599)	1,216,315	952,133	264,182	1,062,142

6 — Marketable securities

	31/12/2019	31/12/2018
UCITS	121,209	212,814
Long-term deposits	1,136,717	602,366
Cash collateral	67,995	53,300
Accrued interest	409	231
TOTAL	1,326,331	868,711

7 — Equity

7.1 Changes in equity

	31/12/2018	Increase	Decrease	31/12/2019
Reserve for assets allocated to RATP	250,700	_	_	250,700
Revaluation surplus ⁽¹⁾	204,840	_	(172)	204,668
Capital endowment	433,367	_	_	433,367
Statutory reserves	184,519	_	_	184,519
Reserves from sale of fixed assets before 1 January 2010	52,255	_	_	52,255
General reserve	57,926	_	_	57,926
Retained earnings	3,291,323	247,581	_	3,538,904
Net income ⁽²⁾	247,581	131,542	(247,581)	131,542
Equity excluding investment grants	4,722,510	379,123	(247,753)	4,853,880
Revaluation provisions ⁽¹⁾	350,793	_	(8,422)	342,371
Provisions for special depreciation	234,765	80,328	(16,040)	299,053
Investment grants	6,813,396	757,768	(263,365)	7,307,799
TOTAL EQUITY	12,121,464	1,217,219	(535,580)	12,803,103

⁽¹⁾ Details of revaluation surplus can be found in the note below; they mainly concern land and revaluation surplus from 1963 (1959 base). (2) Net income for 2018 was appropriated to retained earnings.

7.2 Revaluation surplus

7.2.1 Revaluation in 1976

	Difference at 1 January			Change	Difference at 31 December	
Line items	Gross value of assets	Accumulated depreciation, amortisation or provisions	Retired assets	Allowances for depreciation and amortisation	Gross value of assets	Accumulated depreciation, amortisation or provisions
Property, plant and equipment						
Land	213,196	16,930		172	213,196	17,102
Buildings	1,167,751	817,443	(12,054)	(3,633)	1,155,697	813,810
Technical plant, equipment and industrial tooling	16,630	16,630	(3,309)	(3,309)	13,321	13,321
Transport equipment	27,883	27,883	(685)	(685)	27,197	27,197
Other	506	21			506	21
	1,425,966	878,906	(16,048)	(7,455)	1,409,917	871,451
Financial assets						
Equity investments	15				15	
	15				15	
TOTAL	1,425,981	878,906	(16,048)	(7,455)	1,409,932	871,451
					Net exposure:	538,481

7.2.2 Revaluation in 1959

The amount of revaluation surplus from 1959 amounted to €8,557 thousand in 2019.

8 — Provisions

Position and changes					rsals for the year	
Line items	Provisions at 1 January	Other reclassifications	additions for the financial year		adjustment	Provisions at 31 December
Provisions for contingencies						
Provisions for litigation ⁽¹⁾	16,460		5,944	(335)	(4,781)	17,288
Provisions for work-related accidents	88,849		37,498	(17,667)	(16,176)	92,504
Provisions for operating or financial risks	4,609		13,013	(443)		17,179
Other provisions for non-recurring risks	4		913	(927)		(10)
	109,922		57,367	(19,372)	(20,957)	126,961
Provisions for losses and expenses						
Provisions for non-recurring expenses ⁽²⁾	134,650	27	16,523	(10,565)	(1,330)	139,306
	134,650	27	16,523	(10,565)	(1,330)	139,306
TOTAL	244,573	27	73,890	(29,937)	(22,287)	266,266

The company is not subject to injunctions or financial penalties for anti-competitive practices.

⁽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.

9 — Loans and borrowings

			Maturities	
Financial liabilities	Amount gross	Less than 1 year	1 to 5 years	More than 5 years
Île-de-France loans	168,831	16,845	71,167	80,818
Bond issue				
• eurozone financial markets ⁽¹⁾	4,986,700		2,700,000	2,286,700
• international financial markets				
"Tick'épargne" borrowings	249,308	249,308		
Borrowings from and liabilities to financial institutions				
Calyon loans – 1% social housing loan counterparty	20,474	5,436	15,038	
short-term bank loans	54,797	54,797		
• postal cheques	1,792	1,792		
Loans and borrowings (commercial paper)	1,281,196	1,281,196		
Loans and borrowings allocated to lease assets	29,623	9,843		19,781
Other loans and borrowings	6,285	6,285		
Collateral	(3)	(3)		
Accrued interest	51,360	51,360		
TOTAL	6,850,364	1,676,860	2,786,205	2,387,299

9.1 Net financial debt

	31/12/2019	31/12/2018
Financial assets (A)	1,607,693	1,205,267
Loans to subsidiaries	100,563	102,092
Lease deposit receivables	52,865	53,823
Marketable securities ⁽¹⁾	1,257,927	815,180
Cash collateral investment	67,995	53,300
Cash and cash equivalents ⁽¹⁾	128,343	180,871
Loans and borrowings (B)	6,742,632	6,273,798
Île-de-France loans	168,831	187,340
Borrowings from financial markets	4,986,700	4,697,163
Corporate savings plan loans (bonds)	249,308	165,697
Borrowings from and liabilities to financial institutions	56,600	63,782
Commercial paper	1,281,196	1,102,316
Collateral	(3)	57,500
NET FINANCIAL DEBT (B – A)	5,134,939	5,068,531

⁽¹⁾ Without financial asset dedicated to lease operations

⁽¹⁾ Under its Euro medium-term note (EMTN) programme, RATP issued two bonds:

— for a nominal amount of €500 million in June 2019, maturing in 2029 and bearing fixed interest at 0.35%;

— for a nominal amount of €86.7 million in December 2019, maturing in 2036 and bearing fixed interest at 0.40%.

9.2 Derivative financial instruments

RATP uses financial instruments to manage its exposure to interest rate, foreign exchange and commodities risks.

The cross currency swaps may, where appropriate, cover both interest rate and currency risk. These instruments are broken down by type of risk covered in the analyses below.

9.2.1 Interest rate and foreign currency risk management, excluding transactions on behalf of subsidiaries

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, based on changes in interest rates. The modulation is obtained by implementing or cancelling interest rate swaps and options.

RATP borrows in foreign currencies (bonds, NEU CP). The resulting exposure to exchange rate risk is systematically hedged using currency swaps or cross currency swaps.

Derivatives by maturity

	31/12/2019	31/12/2019	31/12/2018	31/12/2018
In millions of euros	Notional amount	Fair value	Notional amount	Fair value
Pre-hedge fixed-for-floating swaps				
Maturity ≤5 years				
Maturity >5 years			250	(12)
Other fixed-for-floating interest rate swaps				
Maturity ≤5 years	54	(1)		
Maturity >5 years	35	(6)	41	(7)
Foreign exchange swaps				
Maturity (1 to 5 years)	380	(1)	66	
Maturity >5 years				
Cross currency swaps backed by long-term debt				
Maturity (1 to 5 years)			297	116
Maturity >5 years			95	(24)
TOTAL	469	(8)	749	74

Bonds and commercial paper as at 31 December 2019, break down as follows:

In millions of euros, excluding corporate savings plan

Excluding derivatives	Including derivatives
Bond issues	Bond issues
Fixed rate 4,987	Fixed rate 4,987
Floating rate	Floating rate

Commercial paper

Fixed rate

1,371 Fixed rate

1,371 Floating rate

Floating rate

Floating rate

Including derivatives

9.2.2 Derivatives contracted on behalf of the subsidiaries

RATP carries out commodity (diesel), foreign exchange and interest rate hedges for its subsidiaries. The gains and losses from these hedges are entirely transferred back to the subsidiaries that have requested hedges.

Derivatives by maturity

	31/12/2019	31/12/2019	31/12/2018	31/12/2018
In millions of euros	Notional amount	Fair value	Notional amount	Fair value
Other fixed-for-floating interest rate swaps				
Maturity ≤5 years	49	(1)	15	
Maturity >5 years	1		46	
Foreign exchange swaps				
Maturity ≤5 years			25	
Cross currency swaps backed by long-term debt				
Maturity ≤5 years	56	(2)		
Maturity >5 years			56	(2)
Commodity swaps				
Maturity ≤5 years	10		11	(1)
TOTAL	116	(3)	153	(3)

These commitments given to the banks are entirely borne by the subsidiaries.

10 — Other liabilities

			Maturities	
Accounts payable	Amount gross	Less than 1 year	1 to 5 years	More than 5 years
Advances and down payments received	2,161	2,161		
Trade and related payables	346,182	346,182		
Payables for assets and related accounts	599,348	599,348		
Other liabilities	339,058	338,543	516	
Lease payables	202,718			202,718
Prepaid income	210,637	199,280	10,346	1,011
TOTAL	1,700,104	1,485,514	10,862	203,730

11 — Revenue

11.1 Breakdown of revenue

	31/12/2019	31/12/2018
Transport revenue (excluding OrlyVal)	2,404,970	2,459,279
Bandwidth (risks shared with Île-de-France Mobilités)	(82,354)	(14,939)
RATP direct revenue	2,322,616	2,444,340
Service quality bonus	11,711	12,091
Bus bonus after deductible		3,000
C11 – contribution to operating expenses	1,072,025	1,014,945
C12 – contribution to taxes and duties	133,347	107,090
C13 – contribution to the difference between revenue index under C11 and pricing decisions	(67,836)	(88,084)
C2 – contribution to financing of investments	1,002,088	969,915
C4 – specific contribution to financing of rolling stock	12,008	11,615
Other transport revenue	47,367	43,238
Penalties (services + validation + incentives)	(23,619)	(7,965)
Sub-total of Île-de-France Mobilités contributions	2,187,091	2,065,845
1. Transport revenue	4,509,707	4,510,185
2. Transport-related activities	155,500	155,592
Of which fixed penalties and fines	28,624	33,421
3. Other service revenue and sales of residual products	161,393	155,593
TOTAL REVENUE	4,826,600	4,821,370

11.2 Transport revenues allocated by ticket type

	31/12/2019	As a %	31/12/2018
RATP networks: metro, RER and bus	2,404,970	100.0	2,459,279
Weekly, monthly and annual Navigo travel passes	1,529,012	65.1	1,553,335
Other subscriptions (policy, amethyst)	111,450	4.4	100,743
Tickets	679,446	27.1	727,991
Flat-rate travel cards (Mobilis, youth tickets, travel passes for conference goers)	33,048	1.3	33,789
Unsubsidised tickets (Paris Visite, Orlybus, Roissybus)	48,265	1.9	41,842
Other	3,749	0.1	1,580

12 — Payroll costs

12.1 Social security income statement

	Net income 2019	Net income 2018
Health insurance risk		
Standardised employer contributions – PUMA	145,743	173,392
CNSA PUMA contribution	1,726	1,691
Transfers received from CSG tax collected (Acoss) and employee contributions	113,299	145,244
Third-party recovery	1,234	1,005
CAP PUMA reversal	7,800	7,700
Healthcare expenses including PUMA healthcare centres (Espaces santé PUMA)	(285,942)	(306,113)
PUMA overheads	(10,048)	(11,453)
PUMA equilibrium allocation	26,188	(11,466)
RATP social welfare contributions – Health insurance excluding PUMA	73,706	76,110
Other contributions and transfers received excluding PUMA	1,534	1,838
Cash benefits excluding PUMA	(72,596)	(64,543)
Special scheme expenses	(6,132)	(6,770)
Overheads excluding PUMA	(2,913)	(5,059)
NET SURPLUS (DEFICIT) OF THE HEALTH INSURANCE PLAN	(6,401)	1,576
Industrial accidents risk		
Employer contributions	40,073	39,118
Special scheme contributions (including contributions to the industrial accidents fund)	(1,396)	(348)
Benefits in kind and allowance for industrial accidents (AT)	(18,240)	(17,620)
Cash benefits and paid leave	(18,182)	(18,982)
Management expense (net)	(3,949)	(4,081)
NET SURPLUS (DEFICIT) OF INDUSTRIAL ACCIDENTS INSURANCE PLAN	(1,694)	(1,913)
Unemployment risk		
Employer contributions	17,892	14,636
Benefits	(15,079)	(14,656)
Management expense (net)	(231)	(210)
NET SURPLUS (DEFICIT) OF THE UNEMPLOYMENT ALLOWANCE PLAN	2,581	(230)
SOCIAL SECURITY NET SURPLUS (DEFICIT)	(5,513)	(567)

In the balance sheet at 31 December 2019, the position of the receivables and payables was as follows:

• payables: €16 million; i.e. a net position of €64 million.

[•] receivables: €80 million;

12.2 Average number of paid employees

			Changes	
	31/12/2019	31/12/2018	Number	As a %
Average number of employees	44,635	44,370	265	0.6
Breakdown by category:				
Executives + managers	11,349	11,412	(63)	-1
Operators	33,286	32,958	327	1.0
Breakdown by contract:				
Permanent	41,257	41,329	(72)	-0.1
Fixed-term contract	3,378	3,041	337	11.1

12.3 Compensation of directors and executive officers during the year

	31/12/2019	31/12/2018
Directors' fees	13	11
Compensation of the 10 highest-paid executives	2,711	2,969
Compensation of the 10 highest-paid executives		
(excluding severance compensation and payroll adjustments)	2,711	2,519

12.4 URSSAF audit

In the first half of 2018, RATP was audited by Urssaf for the years 2015 to 2017. The main differences identified in the audit relate to the calculation of the basis of the "family allowance" contributions of RATP agents. An adjustment notice was sent to RATP by the administration on 28 March 2019 for an amount of €46.9 million (including a surcharge for late payment of €4.3 million). The principal amount, i.e. €42.6 million, was paid by the company on 23 April 2019 as a precautionary measure. This amount was capitalised by RATP in the balance sheet assets as a receivable from larger

RATP formally disputed the merits of the arguments developed by Urssaf. It referred to the arbitration committee on 21 May 2019. At the end of the two-month period, the committee did not give an opinion, which amounts to an implicit decision of rejection. RATP filed an appeal with the *tribunal de grande instance* (Regional Court) on 21 October 2019 to assert its position. No provisions were recognised in the financial statements as at 31 December 2019.

13 — Financial income

	31/12/2019	31/12/2018
Net finance costs	(134,175)	(141,207)
Dividends	13,616	10,905
Other financial expenses	(19,213)	(51,459)
Other financial income	16,704	52,870
TOTAL	(123,068)	(128,891)

14 — Extraordinary income and expense

	31/12/2019	31/12/2018
Special depreciation net of grants	(43,374)	(47,326)
Transfer to income of property grants (1/10)	4,007	6,606
Loss on disposal and retirement of assets	(7,798)	10,188
Proceeds from financial engineering ⁽¹⁾	578	474
Indemnities received	3,102	10,832
Non-recurring payment to Île-de-France Mobilités	(113)	(8,649)
Other	4,102	4,368
TOTAL	(39,497)	(23,507)

⁽¹⁾ Of which net present value on leases, see Note 17.

15 — Corporate income tax and tax position

15.1 Corporate income tax

RATP's tax income is broken down as follows:

	31/12/2019	31/12/2018
RATP EPIC tax expense		
Net tax consolidation proceeds	5,627	4,224
Tax credits	1,279	3,123
TOTAL	6,907	7,347

In 2019, the application of the Group tax system resulted in net tax savings of €5.6 million recorded in RATP's financial statements in respect of subsidiaries.

The Group tax credit share in RATP's profit amounted to €1.3 million for the 2019 fiscal year.

15.2 Deferred taxes

Deferred taxes are not recognised in the parent company financial statements.

The major deferred taxes are:

In millions of euros	DTA base 31/12/2018	DTA 31/12/2018	DTA base 12/31/2019	DTA 31/12/2019
Revaluation of assets	7,045	2,184	6,803	2,109
Non-taxable grants	4,721	1,463	4,517	1,400
Other temporary differences	283	88	300	93

n millions of euros	DTL base 12/12/2018	DTL 31/12/2018	DTL base 31/12/2019	DTL 31/12/2019
Temporary differences	140	43	142	44

DTA = deferred tax assets.

The fiscal deficit for the year amounted to €309 million.

Within the tax consolidation group, the fiscal deficits for the year amounted to €279 million.

15.3 Extravagant expenditure not eligible for tax deduction

No expense referred to by article 39-4 of the French General Tax Code (Code général des impôts) was recorded in the year.

15.4 General charges not eligible for tax deduction

No expense or overhead expense referred to by article 223 quinquies of the French General Tax Code (Code général des impôts) was recorded in the year.

15.5 Tax audit

RATP was subject to a tax audit for the years 2015-2017. The audit ended in the first half of 2019 and resulted in an insignificant adjustment (€0.3 million).

16 — Off-balance sheet financial commitments

Commitments given	31/12/2019	31/12/2018
1. Subsidiaries and equity investments		
Guarantee for RATP Habitat	382	481
RATP Dev commodity hedges	11,495	10,767
2. Not-for-profit entities		
Compagnons du voyage	100	100
RATP Foundation	780	1,560
3. Employee benefits		
Employee loans: guarantee for the MCS	171	207
Employees: "Low income housing" guarantees	109,693	123,141
Retirement benefits	336,108	222,606
Death indemnities for current employees	21,771	19,951
Death indemnities for retirees	43,287	37,984
Work-related accident and disability allowance for retirees and those with vested rights	380,786	305,108
Early retirement	2,023	2,572
4. Financial transactions		
Cross currency swaps on bonds ⁽¹⁾		297,170
Cross currency swaps on deposits	52,865	53,823
Foreign exchange swaps on commercial paper	380,807	65,815
Train lease transactions and leaseholds	165,662	177,086
TOTAL	1,505,929	1,318,372

Commitments received	31/12/2019	31/12/2018
Cross currency swaps on bonds ⁽¹⁾		297,170
Cross currency swaps on deposits	52,865	53,823
Foreign exchange swaps on commercial paper	380,807	65,815
Commodity hedges	11,495	19,263
Bank guarantees received from suppliers	343,842	343,014
TOTAL	789,009	779,085

⁽¹⁾ RATP has chosen to treat swaps in the same way as traditional loans and borrowings.

The discount rate used to calculate post-employment benefits was 0.75% as at 31 December 2019. It was 1.75% as at 31 December 2018.

17 — Train lease transactions and leaseholds

17.1 Leasehold transactions

Impacts on the balance sheet as at 31 December 2019

In thousands of euros	31/12/2019	31/12/2018
Lease receivables	199,992	216,650
Lease payables	202,718	219,855
OUTSTANDING NPV	2,726	3,205
Change in NPV = effect on net income	479	478

Leases generated income of €479 thousand in 2019. The effects are recognised as extraordinary income and expense.

17.2 Swedish lease transactions

Impacts on cash position on the lease signature date

In thousands of euros	
Agreements	
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

The net present value of leases generated income of €125 thousand in 2019. The effects are recognised as extraordinary income and expense.

18 — 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.

Agreements	Original value	Term (years)	Residual value as at 31/12/2019
Philidor Maraîchers	25,308	25	14,740
Lagny offices	12,106	15	8,248

Leased assets

Balance sheet item	Initial cost	for the financial year ⁽¹⁾	accumulated ⁽¹⁾	Net value
Land	2,840			2,840
Buildings	39,910	750	21,508	18,402
Technical plant, equipment and industrial tooling				
Other plant, property and equipment	1,030	214	731	300
Property, plant and equipment in progress				
TOTAL	43,780	964	22,239	21,541

⁽¹⁾ Depreciation for the period and the accumulated depreciation that would have been recorded if RATP owned these assets.

Lease commitments

	Lease payments		Outstar			
Balance sheet item	for the financial year	accumulated	up to 1 year	+1 to 5 years	+5 years	Residual price
Land					2,840	
Buildings	2,143	21,946	3,065	16,199	6,638	2,287
Technical plant, equipment and industrial tooling						
Other plant, property and equipment	214	731		300		
Property, plant and equipment in progress						
TOTAL	2,357	22,677	3,065	16,498	9,478	2,287

19 — Statutory Auditors' fees

The statutory audit fees incurred for legal audit of the financial statements are broken down as follows:

	KPMG	Mazars
Statutory audit ⁽¹⁾	349	300
Work/services directly related	41	25
TOTAL	390	325

⁽¹⁾ The amounts are recurrent fees paid to the Statutory Auditors for the mission and for any additional assignments related to their mission.

20 — Subsidiaries and equity investments

20.1 Breakdown of subsidiaries

The table below provides financial information on the companies in which RATP holds more than 20% interest or equity investments of more than €1.5 million.

				Carrying of sh		Loans and advances			Provisional	
Position as at 31 December 2019	Share capital	Additional paid-in capital	% of interest held by RATP	Gross	Net	granted by RATP and not yet repaid	Guarantees granted by the RATP	taxes at end December 2019	net result at end December 2019	Dividends received by RATP in 2019
1. Subsidiaries										
RATP PARTICIPATIONS 54, quai de la Rapée 75012 Paris (Siren 844 839 415)	516,884		100	516,884	516,884					
RATP COOPÉRATION 54, quai de la Rapée 75012 Paris (Siren 419 997 044)	119,790	21,535	100	119,790	119,790	2,110		132	3,005	
RATP PARIS RÉGION 54, quai de la Rapée 75012 Paris (Siren 844 695 890)	37		100	37	37					

20.2 Items with related parties

Related parties concern companies included in the consolidation scope.

The main transactions with related companies and the amounts due to these related companies, or from them, are broken down as follows:

	31/12/2019	31/12/2018
Assets		
Financial assets	753,575	624,720
Trade receivables and related accounts	14,113	9,355
Other receivables	5,157	5,434
Other financial receivables	7,942	
TOTAL	780,787	639,509
Liabilities:		
Financial liabilities		
Trade and related payables	14,951	11,948
Other liabilities	127	395
TOTAL	15,078	12,343

20.3 Major stakes and takeovers

In accordance with the provisions of article L. 233-6 of the French Commercial Code (*Code de commerce*) during the previous financial year, RATP did not acquire a direct stake in any company having its registered office in France.

In accordance with the provisions of article L. 233-6 of the French Commercial Code (*Code de commerce*) during the previous financial year, RATP did not take over any company having its registered office in France.

20.4 Inter-company loans

During last year, RATP did not grant loans on an ancillary basis of less than two years to micro-companies, SMEs or mid-sized companies with which it has an economic relationship that would justify these loans (article L. 511-6 of the French Commercial Code [Code de commerce]).

21 — Economic interest groups

Position as at 31 December 2019	RATP % contribution to overheads
EURAILTEST 1, boulevard Saint-Martin 75003 Paris (Siren 421 526 468)	10.00%
COMUTITRES 21, boulevard Haussmann 75009 Paris (Siren 433 136 066)	59.50%

22 — 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 (*Code des transports*) 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.

22.1Scope

22.1.1 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 SNCF Réseau.

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 has a separate department within the company. The Infrastructure management division reports directly to the Chairman and CEO.

The support functions used by this activity are not included in its scope.

22.1.2 Operator of public passenger transport services

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.

22.2 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 invoice the activities appropriately, in accordance with general practice. Such agreements govern the scope of the transfers, the valuation principles and the invoicing methods.

22.2.1 Balance sheet

22.2.1.1 Capitalised assets, investment grants and legal revaluations

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	то	IM
Tramway lines, maintenance workshops, rectifier stations	Х	
Metro lines, maintenance workshops, rectifier stations		Х
RER lines, maintenance workshops, rectifier stations		Х
Centralised control rooms		Х
Bus stations	X	
Bus routes with dedicated lanes	Х	
Bus stations	X	
Administrative buildings	Х	
Personnel buildings	Х	
Logistic platforms	Х	
Maintenance workshops for railway infrastructure and related technical work		Х
Passenger rolling stock	Х	
Passenger rolling stock maintenance equipment	Х	
Metro and RER maintenance vehicles		Х
Tramway maintenance vehicles	Х	

Investment grants, revaluation surplus and revaluation provisions are allocated to the related 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 the year-end reporting date, these projects amounted to €12 million net of investment grants.

22.2.1.2 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.

22.2.1.3 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.

22.2.1.4 Equity and net debt

As at 1 January 2012, the balance was allocated according to the separate "net debt/equity" gearing ratios determined for the Infrastructure management and Transport operations activities. The levels were approved to be consistent with target long-term gearing ratios and observed market data for each activity.

The values as at 1 January 2012 were as follows:

In millions of euros		Transport operations	Infrastructure management	RATP
Net assets allocated	А	3,835	3,941	7,776
In %		49	51	100
Net debt	В	(2,272)	(2,815)	(5,087)
In %		45	55	100
Equity ⁽¹⁾	С	(1,563)	(1,126)	(2,689)
In %		58	42	100
Balance sheet position	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.

22.2.2 Income statement

Since 1 January 2012, each activity recognises its cash flows in each of the two separate accounts.

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 revenues are fully allocated to the Transport operations activity;
- Île-de-France Mobilités' contributions are fully invoiced 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 RATP-Île-de-France Mobilités agreement (the Transport operations activity will need to use the services of Infrastructure management in order to meet performance objectives and to fulfil 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 the Infrastructure management activity's net debt, assuming that it is proportionately identical to that of the Transport operations activity.

The income corresponding to the charges for occupying public space (advertising revenues, commercial rents and telecom charges) was allocated to Transport operations activities until 2018. This income, inseparable from infrastructure, and therefore attributable to Infrastructure management in its capacity as asset owner, is allocated to Infrastructure management activities as of 2019. In 2019, these revenues, net of related expenses, amounted to €103 million.

22.3 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.

22.3.1 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.

22.3.2 Agreement types

There are three types of agreements:

- 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;
- 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.).

22.3.3 Valuation of agreements

Given that the internal transfers occur within the same legal entity, value-added tax is excluded.

22.3.3.1 Type 1 agreements

The valuation of type 1 agreements is set out in the RATP-Île-de-France Mobilités 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.

22.3.3.2 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").

22.3.3.3 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 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.

22.4 Financial statements of the Transport operations and Infrastructure management activities

22.4.1 Financial statements: balance sheet assets

In thousands of euros	Transp operations		Infrastructure management		(State-owned and commercial	industrial
Assets	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Intangible assets	535,280	510,553	49,548	36,867	584,829	547,420
Research and development costs	155,135	161,320			155,135	161,320
Lease rights	1,023	1,058			1,023	1,058
Other	164,355	157,389	16,880	16,616	181,235	174,006
Work in progress	214,767	190,785	32,668	20,251	247,435	211,036
Property, plant and equipment:	9,465,392	9,078,121	8,342,517	8,007,199	17,807,908	17,085,320
Land	306,301	303,783	295,816	295,704	602,117	599,487
Buildings	1,414,125	1,429,989	5,232,239	5,065,939	6,646,365	6,495,929
Technical plant, equipment and industrial tooling	490,906	478,796	1,493,406	1,448,398	1,984,311	1,927,194
Transport equipment	4,155,743	4,383,109	32,352	32,076	4,188,095	4,415,184
Other	49,863	50,851	7,160	6,545	57,024	57,397
Work in progress, advances and down payments	3,048,453	2,431,593	1,281,543	1,158,537	4,329,997	3,590,129
Financial assets	911,582	779,429	46	56	911,627	779,486
Equity investments	636,759	505,865			636,759	505,865
Receivables from equity investments	100,602	102,151			100,602	102,151
Other long-term investments	2,577	2,439			2,577	2,439
Loans	34,291	39,232	6	13	34,297	39,245
Other	137,353	129,742	40	44	137,393	129,786
Fixed assets (I)	10,912,254	10,368,103	8,392,111	8,044,122	19,304,365	18,412,226
Inventories and work in progress	198,968	173,461	42,195	36,572	241,163	210,033
Advances and down payments to suppliers	5,163	1,942	722	36	5,885	1,979
Receivables	1,002,100	901,578	152,666	116,168	1,142,872	1,016,087
Trade receivables and related accounts	77,268	113,139	35,379	14,346	112,647	127,485
Receivables from the State and other public authorities	490,817	324,868	108,369	97,407	587,315	421,650
Other	234,023	246,921	8,918	4,414	242,918	250,302
Lease receivables	199,992	216,650			199,992	216,650
Financial assets	1,457,677	1,092,571	417	317	,	1,049,582
Marketable securities	1,326,331	868,711			1,326,331	868,711
Cash and cash equivalents	131,346	223,859	417	317	128,343	180,871
Prepaid expenses	67,542	43,989	17	88	67,559	44,077
Current assets (II)	2,731,450	2,213,541	196,017	153,181	2,912,152	2,321,757
Loan transaction costs (III)	2,316	2,979			2,316	2,979
Bond redemption premiums (IV)	9,755	10,161			9,755	10,161
Unrealised translation losses (V)	5,146	4,538			5,146	4,538
TOTAL ASSETS (I + II + III + IV + V)	13,660,921	12,599,322	8,588,128	8,197,304	22,233,734	20,751,661

22.4.2 Financial statements: balance sheet liabilities

In thousands of euros	Transport operations Infrastructure management		nanagement	(State-owned and commercial	lindustrial	
Equity and liabilities	31/12/2019	31/12/2018	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Reserve for assets allocated to RATP	250,700	250,700			250,700	250,700
Revaluation surplus	55,934	56,106	148,733	148,733	204,667	204,840
Capital endowment	433,367	433,367			433,367	433,367
Reserves	294,699	294,699			294,699	294,699
Reserve from the disposal of assets allocated by the Île-de-France transport authority (Île-de-France Mobilités) and no longer used (redeployed)	184,519	184,519			184,519	184,519
Reserve from the disposal of assets made available 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
Transport operations equity transfer at 1 January 2012	(1,125,661)	(1,125,661)	1,125,661	1,125,661		
Retained earnings	2,804,401	2,709,549	734,502	581,774	3,538,904	3,291,323
Net income for the period (surplus or loss)	(104,481)	94,853	236,023	152,728	131,542	247,581
Net equity	2,608,959	2,713,613	2,244,919	2,008,896	4,853,879	4,722,510
Regulated provisions	97,537	84,658	543,888	500,901	641,424	585,558
Investment grants	4,775,079	4,350,585	2,532,720	2,462,810	7,307,799	6,813,396
Equity (I)	7,481,576	7,148,856	5,321,527	4,972,608	12,803,103	12,121,464
Provisions for contingencies	125,901	108,564	1,060	1,358	126,961	109,922
Provisions for losses and expenses	136,405	132,063	2,901	2,588	139,306	134,650
Contingency and loss provisions (II)	262,306	240,627	3,961	3,946	266,266	244,573
Financial liabilities	3,829,559	3,447,658	3,024,235	2,982,760	6,850,374	6,386,854
• Île-de-France loans	168,831	187,340			168,831	187,340
Bond issue	5,146,008	4,862,860			5,146,008	4,862,860
Transport operations debt transfer at 1 January 2012	(2,815,000)	(2,815,000)	2,815,000	2,815,000		
Borrowings from and liabilities to financial institutions (short-term bank loans)	71,708	60,787	8,786	71,848	77,073	89,071
• IM – TO debt internal transfers	(194,567)	(95,912)	194,567	95,912		
Other loans and borrowings	1,401,219	1,195,073	5,882		1,407,101	1,195,073
Accrued interest	51,360	52,509			51,360	52,509
Advances and down payments received on orders in process	131,618	1,190	1,343		132,961	1,190
Trade and related payables	324,975	263,800	21,207	19,688	346,182	283,488
Taxes and payroll-related payables	583,210	674,556	37,417	36,319	608,755	711,494
Payables for assets and related accounts	425,865	410,033	173,483	181,851	599,348	591,883
Other liabilities	207,933	109,291	347	132	208,258	109,421
Lease payables	202,718	219,855			202,718	219,855
Prepaid income	206,029	76,896	4,608		210,637	76,896
Liabilities (III)	5,911,908	5,205,296	3,262,640	3,220,750	9,159,234	8,381,081
Unrealised translation gains (IV)	5,131	4,544			5,131	4,544
TOTAL EQUITY AND LIABILITIES (I + II + III + IV)	13,660,921	12,599,322	8,588,128	8,197,304	22,233,734	20,751,661

22.4.3 Financial statements: income statement

In thousands of euros	Transport operations	Infrastructure management	Cancellation of intercompany transactions	EPIC (State-owned industrial and commercial public utility)
Operating income	5,961,001	1,338,674	(1,271,809)	6,027,867
Revenue	5,078,088	1,020,321	(1,271,809)	4,826,600
Revenue from transport services	4,509,706			4,509,706
Internal transfers	365,071	906,738	(1,271,809)	
Transport-related activities	47,289	108,211		155,500
Non-transport revenue	153,573	4,655		158,228
Sales of by-products	2,448	718		3,165
Other income	713,458	243,101		956,559
Stock of manufactured goods	17,518	5,536		23,054
Capitalised production	149,406	231,025		380,431
Provision reversals and expenses transferred	490,439	4,693		495,132
Operating subsidies	468			468
Other income	55,626	1,847		57,474
Income used to offset depreciation and amortisation expenses	169,456	75,253		244,709
Reversal of special revaluation provisions	344	8,235		8,579
Portion of investment grants transferred to the income statement	169,112	67,018		236,130
Operating expenses	6,018,203	994,271	(1,271,809)	5,740,667
Cost of purchased goods and services	2,484,504	445,305	(1,271,809)	1,658,000
Energy	208,945	1,082		210,027
• Electricity	95,100	641		95,741
• Fuel	100,383	130		100,514
Heating	13,461	311		13,772
Cost of leased tracks	31,352			31,352
User rights payable to SNCF	20,921			20,921
Equipment, supplies and other external expenses	2,223,286	444,223	(1,271,809)	1,395,700
Raw materials and supplies	204,693	30,214		234,907
Other external services	2,018,593	414,009	(1,271,809)	1,160,793
Tax, duties and other payables	245,262	68,181		313,443
Payroll costs	2,583,418	141,925		2,725,344
Wages and salaries	1,770,439	96,757		1,867,196
Payroll-related costs	761,246	42,479		803,725
RATP employee benefit plan cost, net	5,513			5,513
Profit-sharing Profit-sharing	46,220	2,689		48,910
Depreciation, amortisation and provisions	679,716	337,915		1,017,631
Asset depreciation and amortisation	605,606	335,520		941,126
Asset provisions				
Provisions for current assets	3,834	1,654		5,489
Provisions for contingencies and liabilities	70,276	740		71,016
Other expenses	25,303	945		26,249
OPERATING INCOME (I)	(57,202)	344,403		287,200

In thousands of euros	Transport operations	Infrastructure management	Cancellation of intercompany transactions	EPIC (State-owned industrial and commercial public utility)
Financial income	132,385	8	(77,870)	54,523
From equity investments	13,616			13,616
From other long-term investments and asset receivables	1,225			1,225
Accrued interest and related income	31,239	8		31,247
Internal transfers	77,870		(77,870)	
Provision reversals and expenses transferred	1,461			1,461
Foreign exchange gains	6,975			6,975
Net proceeds from disposal of marketable securities				
Financial expenses	177,335	78,127	(77,870)	177,592
Accrued interest and related expenses	161,676			161,676
Internal transfers		77,870	(77,870)	
Depreciation, amortisation and provisions	11,538	257		11,795
Foreign exchange losses	2,973			2,973
Losses on disposal of marketable securities	1,148			1,148
NET FINANCIAL INCOME (II)	(44,950)	(78,119)		(123,068)
ORDINARY INCOME (I + II)	(102,152)	266,284		164,132
Non-recurring income	45,676	30,408		76,084
Operating transactions	4,265	4,473		8,738
Capital transactions	19,537	9,520		29,057
Lease income	475			475
Other non-recurring income	3,082	2,228		5,310
Provision reversals and expenses transferred	18,316	14,188		32,504
Non-recurring expenses	54,912	60,669		115,581
Operating transactions	3,464	242		3,706
Other non-recurring expenses	29,119	8,698		37,817
Depreciation, amortisation and provisions	22,329	51,730		74,058
EXTRAORDINARY INCOME AND EXPENSE	(9,236)	(30,262)		(39,497)
Corporate income tax	6,907			6,907
TOTAL INCOME	6,139,062	1,369,090	(1,349,679)	6,158,474
TOTAL EXPENSES	6,243,543	1,133,067	(1,349,679)	6,026,932
NET INCOME	(104,481)	236,023		131,542

23 — Post-balance sheet events

Nil.

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RATP (B. Marguerite, Jean-François Mauboussin).

PRACTICALITIES

RATP Group's activity and sustainable development report and the financial & CSR report are also available at www.ratp.fr under the heading "Group".

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