



(Translation from the Italian original which remains the definitive version)

Rete Ferroviaria Italiana S.p.A.

**Financial statements as at and for the year ended
31 December 2019**

(with report of the auditors thereon)

KPMG S.p.A.

23 March 2020



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Independent auditors' report pursuant to article 14 of Legislative decree no. 39 of 27 January 2010

*To the sole shareholder of
Rete Ferroviaria Italiana S.p.A.*

Report on the audit of the financial statements

Opinion

We have audited the financial statements of Rete Ferroviaria Italiana S.p.A. (the "company"), which comprise the statement of financial position as at 31 December 2019, the income statement and the statements of comprehensive income, changes in equity and cash flows for the year then ended and notes thereto, which include a summary of the significant accounting policies.

In our opinion, the financial statements give a true and fair view of the financial position of Rete Ferroviaria Italiana S.p.A. as at 31 December 2019 and of its financial performance and cash flows for the year then ended in accordance with the International Financial Reporting Standards endorsed by the European Union.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the "Auditors' responsibilities for the audit of the financial statements" section of our report. We are independent of the company in accordance with the ethics and independence rules and standards applicable in Italy to audits of financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Management and coordination

As required by the law, the company disclosed the key figures from the latest financial statements of the company that manages and coordinates it in the notes to its own financial statements. Our opinion on the financial statements of Rete Ferroviaria Italiana S.p.A. does not extend to such data.



Responsibilities of the company's directors and board of statutory auditors ("Collegio Sindacale") for the financial statements

The directors are responsible for the preparation of financial statements that give a true and fair view in accordance with the International Financial Reporting Standards endorsed by the European Union and, within the terms established by the Italian law, for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

The directors are responsible for assessing the company's ability to continue as a going concern and for the appropriate use of the going concern basis in the preparation of the financial statements and for the adequacy of the related disclosures. The use of this basis of accounting is appropriate unless the directors believe that the conditions for liquidating the company or ceasing operations exist, or have no realistic alternative but to do so.

The *Collegio Sindacale* is responsible for overseeing, within the terms established by the Italian law, the company's financial reporting process.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISA Italia 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 part of an audit in accordance with ISA Italia, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors;
- conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are



inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the company to cease to continue as a going concern;

- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance, identified at the appropriate level required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements

Opinion pursuant to article 14.2.e) of Legislative decree no. 39/10

The company's directors are responsible for the preparation of a directors' report at 31 December 2019 and for the consistency of such report with the related financial statements and its compliance with the applicable law.

We have performed the procedures required by Standard on Auditing (SA Italia) 720B in order to express an opinion on the consistency of the directors' report with the company's financial statements at 31 December 2019 and its compliance with the applicable law and to state whether we have identified material misstatements.

In our opinion, the directors' report is consistent with the company's financial statements at 31 December 2019 and has been prepared in compliance with the applicable law.

With reference to the above statement required by article 14.2.e) of Legislative decree no. 39/10, based on our knowledge and understanding of the entity and its environment obtained through our audit, we have nothing to report.

Rome, 23 March 2020

KPMG S.p.A.

(signed on the original)

Gabriele de Gennaro
Director of Audit

(Translation from the Italian original which remains the definitive version)

Rete Ferroviaria Italiana S.p.A.

2019 ANNUAL REPORT

RETE FERROVIARIA ITALIANA S.p.A. – Ferrovie dello Stato Italiane group

Single-member company, managed and coordinated by Ferrovie dello Stato Italiane S.p.A. pursuant to article 2497-*sexies* of the Italian Civil Code and Legislative decree no. 112/2015

Registered office: Piazza della Croce Rossa 1, 00161 Rome

Fully paid-up share capital: €31,528,425,067.00

Registered with the Rome company registrar

Tax code: 01585570581 and VAT number: 01008081000 - R.E.A. number: 758300

MISSION

Rete Ferroviaria Italiana S.p.A. ("RFI") is the company within the Ferrovie dello Stato Italiane group ("FS Italiane group") responsible for managing the national railway infrastructure. With decree no. 138 – T of 31 October 2000, the Ministry of Transport and Navigation assigned the company a 60-year concession to operate the Italian railway infrastructure.

RFI owns the infrastructure consisting of the portion that belonged to the former public body, Ferrovie dello Stato (and which makes up the body's assets) and the portion acquired subsequently using own funds (obtained through third party financing and capital injections, first from the government and subsequently Ferrovie dello Stato Italiane) and, currently, through government grants related to assets.

To pursue its mission, RFI carries out the following main activities:

- designing, building, operating, managing and maintaining the Italian railway infrastructure pursuant to Legislative decree no. 112 of 2015, including passenger transport stations, modal and intermodal freight plant and the management of control and safety systems related to train operation, including HS/HC trains;
- promoting the integration of railway infrastructures and cooperation with other railway infrastructure operators;
- all other duties assigned to RFI as the infrastructure operator pursuant to current legislation, such as: access to the infrastructure and services, collecting the fee for the use of the infrastructure from railway companies, and any other activities necessary or useful to pursuing the institutional purposes assigned by the competent national and EU authorities.

During the extraordinary meeting on 5 April 2019, RFI's shareholder approved an amendment to the by-laws, expanding the company's corporate purpose to include: (i) the operation of railway links by sea between Sicily and the peninsula using "high-speed boats"; (ii) designing, building, operating, managing and maintaining regional railway infrastructure under Legislative decree no. 422 of 19 November 1997, including the equipment, areas and assets that are strictly related to and necessary and functional for such operation, in accordance with the provisions of article 47.4/11-*bis* of Law decree no. 50/2017. Furthermore, RFI's railway transport safety obligations were revised for compliance with the legislation currently applicable to the sector and the references to the previous Legislative decree no. 188/2003 were updated to Legislative decree no. 112/2015, which now applies.

The operator's responsibilities mainly consist of the following duties:

- ensuring that the railway lines and infrastructures are 100% usable and efficient at all times;
- managing investments to strengthen, technologically update and develop railway lines and plant;
- building the railway connection by sea between the peninsula and Sicily and Sardinia, with the possibility of operating connections to Sicily using high-speed boats;
- monitoring the health of employees, workspaces, services and public areas;
- coordinating research on materials, products and the environment;
- designing, building, managing and maintaining regional railway infrastructure in accordance with Law decree no. 50/2017;

- promoting the integration of railway infrastructure and cooperation with other infrastructure operators, particularly throughout the European Union.

COMPANY OFFICERS AND INDEPENDENT AUDITORS**Board of directors:**

Chairwoman Claudia Cattani

CEO Maurizio Gentile

Directors Maurizio Mauri

Fabiana Lungarotti

Luciano Grazzini

Board of statutory auditors:

Chairman Mauro D'Amico

Standing statutory auditors Giancarla Branda

Francesco Marolda

Alternate statutory auditors Gianpaolo Davide Rossetti

Federica Silvestri

Manager in charge of financial reporting: Vera Fiorani

Independent auditors: KPMG S.p.A.

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CHAIRWOMAN'S LETTER

Dear Shareholder,

RFI invested a total of over €4,438 million in 2019, confirming its deep commitment to developing and maintaining the Italian railway network. The company allocated approximately €1,205 million of total investments to large-scale infrastructure projects, roughly €3,233 million to maintaining the efficiency of infrastructure and for work throughout the country (including €247 million for technology-related projects).

As the Italian infrastructure operator, RFI generated a profit for 2019 of €302 million, in line with the trend of the past three years, as profit rose by 5% in 2018 (on 2017) and by 10% in 2019 (on 2018). This improvement is partly due to the growth in the railway traffic in the market segments and partly to the larger variety and quantity of services provided to the railway companies that use the network.

The gross operating profit increased by 7% on 2018 as processes were made more efficient, enabling the company to contain operating costs compared to the previous year. The company's operating profit was also positive, up 12% on 2018.

Having commenced in 2017, the procedure for the new 2017-2021 Government Programme Contract - Investments (GPC-I) was completed in 2019 with the registration of Interministerial decree no. 87 of 7 March 2019 of the Ministry of Infrastructure and Transport ("MIT") and the Ministry of the Economy and Finance ("MEF"), containing the approval of the Court of Auditors. The contract establishes additional funding of roughly €13.3 billion, which will, in line with the Italian railway network development strategy, enable RFI to make the existing infrastructure safer and more modern, but also relaunch railway freight transport by prioritising the development of intermodal hubs for better accessibility to ports, interports and airports.

In February 2019, RFI's board of directors approved the 2019-2023 business plan, an integral part of Ferrovie dello Stato Italiana S.p.A.'s business plan, which reflects the group's new strategic vision of "focusing more on the core railway business". In line with this vision, RFI has set the strategic goal of contributing to the country's sustainable development and attractiveness by satisfying the mobility needs of people and logistics requirements and by increasing the country's connectivity and integration.

RFI plans to achieve these goals by taking action in five priority areas: - *Stations* (with a new concept of the station as a modal integration hub and by redeveloping the areas around the station), - *Local public transport* (upgrades, greater speed and more stations), - *Long haul* (upgrades and greater speed on the main European lines, and airport links), - *Logistics* (connecting ports, interports, production districts and greater international cooperation between operators), and - *Environmental and social aspects* (water and energy efficiency, green procurement and allocating assets not used in operations for social purposes).

The company strives tirelessly to improve railway safety, devoting resources, vehicles, processes, technologies and studies to increase the resilience of the infrastructure and better protect the ground from hydro-geological and seismic risks as land grows increasingly fragile.

Despite its profound commitment in this respect, a railway accident occurred on 6 February 2020 near Lodi, involving the HS Frecciarossa 9595 train travelling between Milan and Salerno and causing the death of two drivers and injuries to about 30 passengers. The entire company expresses its sincere condolences to the loved

ones of the victims and its solidarity with the families of the passengers who were involved. Pending the findings of investigations that shed light on the dynamics and causes of the accident, RFI confirms its daily commitment to ensuring high standards of safety and reliability.

In 2019, RFI took large steps in the integration of **sustainability** in its strategies in various areas. In April 2019, the company's board of directors approved the long-term sustainability goals (2030-2050) consisting of: - *Safety* (zero fatal events), - *Energy and emissions* (carbon neutrality) and - *Sustainable mobility* (increase in the modal shift for passengers and freight transport).

Because of the specific nature of its activities, its technical expertise and its innovation capability, RFI is poised to contribute significantly to the conservation and reduced consumption of natural resources, the safety and resilience of transport infrastructure and the rise of new mobility models, as it strives to create value for all stakeholders and the country at large.

After receiving approval from the board of directors, RFI's investment and management plans were more specifically assessed and geared towards the long-term sustainability goals. These goals relate to infrastructure and traffic safety programmes throughout the country, including seismic and hydro-geological risk assessments, technological progress and performance improvements in freight transport and local public transport, as well as new lines, the development of existing lines and metro bypasses.

In terms of sustainability, in March 2019, RFI, received the highest possible level - platinum - of Envision certification for its project to upgrade the Frasso Telesino - S. Lorenzo section of the HS/HC Naples - Bari railway route. Recognised as an example of highly sustainable infrastructure, this project is the first in Europe to receive Envision certification, which is used around the world to assess and calculate the tangible value of the economic, environmental and social sustainability of infrastructure.

In 2019, RFI carried out a number of activities to engage institutions, particularly regions and municipalities, in its stations project to harmonise the policies of the various competent authorities, raising their awareness of the central role that railway stations play in sustainable mobility policies.

As in 2018 and 2017, RFI continued surveying the reporting indicators for the 2019 sustainability report, using over 200 GRI (Global Reporting Initiative) indicators covering various areas, such as energy, the environment, materials for infrastructure, noise abatement, the supply chain, network safety, personnel and occupational safety, sanctions, social use of non-functional assets, customer satisfaction, complaints, product/service responsibility, sales offer, etc.

RFI carried out several important projects in 2019 to strengthen the **internal control** and risk management system. Specifically, it voluntarily adopted a system to prevent bribery and corruption, the ABC system, covering both instances of managerial misconduct and malfunctioning, in accordance with the group's "ABC policy guidelines" and meeting the general aim of using the company's model as a genuine operational support tool for company units to effectively protect against the risk of corruption.

In addition, RFI has devoted specific attention to the lawfulness protocols for the prevention of mafia infiltration attempts, extending anti-mafia controls to amounts and types of contracts beyond those required by law. One particular protocol is that for "large-scale works", with particularly stringent and restrictive anti-bribery and

corruption clauses, along with the operational protocols to monitor cash flows, which RFI has extended to all operators in the contract chain.

Furthermore, to benefit the strengthening of the internal control system, RFI also: - approved the tax risk recognition, measurement, management and control system (the tax control framework), which was necessary in order to be admitted by the tax authorities to the tax co-operative compliance programme introduced with Legislative decree no. 128 of 5 August 2015; - set up the Compliance department to define and update the company-wide compliance model; - established the Risk Management and DPO (data protection officer) unit, as the evolution of the previously existing Risk Officer reporting to the CEO, in order to strengthen second-level controls.

In 2019, **non-recurring transactions** included the sale of the non-controlling investment in Centostazioni Retail S.p.A., thereby completing the reorganisation of the station network, which had begun in 2018, and the acquisition of 100% of Terminali Italia S.r.l. to improve the management model for access to and use of its freight terminals, which will include completing the offer with additional last-mile services for freight transport customers.

As part of the larger plan to integrate the "railways under concession" into the national railway infrastructure, in 2019, RFI took over management of Ferrovia Centrale Umbra in a transaction that was completed on 24 June 2019 with the signing of the deed for the merger of UM Ferro S.r.l. into RFI, effective as from 1 July 2019.

Furthermore, a new company, Infrarail Firenze S.r.l., was set up in 2019 to perform all services and activities necessary to ensure the safety and protection of work sites for the Florence hub's high-speed rail bypass. The company has not yet started operating.

Last but not least, in 2019, RFI was included in the list of institutional units belonging to the sector of the **general government** and which are included in the government's consolidated income account prepared by ISTAT (the national statistics institute) each year. Normally the institutional units included in the ISTAT list are subject to public spending limitations and obligations as a result of their inclusion in the scope of the general government. However, article 40 of Law decree no. 124/2019, converted into Law no. 157/2019, established that these limitations and obligations do not apply to RFI, thereby guaranteeing the company's continued financial and operational independence, which is necessary to efficiently perform its operations in the pursuit of institutional and corporate objectives.

The board of directors

The Chairwoman

DIRECTORS' REPORT

KEY AND GLOSSARY

Below is a description of the criteria used to calculate the most frequently used performance indicators for the purposes of this report. Such criteria differ from the criteria applied to the financial statements and which management finds useful in monitoring the company's performance and believes reflect the results of operations and financial trends of its business segments:

- **Gross operating profit:** this is an indicator of the performance of operations and reflects the core business only. It is calculated as the difference between revenue and operating costs.
- **Operating profit:** this is an indicator of the performance of operations and is calculated as the sum of gross operating profit and amortisation and depreciation, impairment losses (impairment gains) and provisions.
- **Net operating working capital:** this is the sum of inventories, contract assets, current and non-current trade receivables, current and non-current trade payables and advances to suppliers.
- **Other assets, net:** these reflect the sum of assets and advances from the Ministry of the Economy and Finance (MEF) for grants, deferred tax assets, other current and non-current assets and other current and non-current liabilities.
- **Working capital:** this is the sum of net operating working capital and other assets, net.
- **Net non-current assets:** these reflect the sum of property, plant and equipment, investment property, intangible assets and equity investments.
- **Net assets held for sale:** these consist of assets whose carrying amount will be recovered principally through a sale transaction rather than through continuing use.
- **Net invested capital (NIC):** this is the sum of working capital, net non-current assets, other provisions and net assets held for sale.
- **Net financial debt (NFD):** this financial indicator consists of bonds, non-current bank loans and borrowings, the current portion of non-current bank loans and borrowings, current loans and borrowings from other financial backers, cash and cash equivalents and current and non-current financial assets.
- **Equity (E):** this is a financial statements indicator calculated as the sum of share capital, reserves, retained earnings (losses carried forward), current and non-current derivative liabilities and the profit (loss) for the year.
- **Gross operating profit margin:** this profitability indicator is calculated as the ratio of gross operating profit to operating revenue.
- **Operating profit margin – ROS (return on sales):** this sales profitability indicator is calculated as the ratio of operating profit to revenue.
- **Debt/equity ratio:** this indicator is used to measure the company's debt. It is calculated as the ratio between net financial debt and equity.

- **ROE (return on equity):** this is a profitability indicator for equity and is calculated as the ratio of profit/loss for the year and average equity (average the opening and closing balances), net of the profit/loss for the year.
- **ROI (return on investment):** this is a profitability indicator for invested capital through core business operations. It is calculated as the ratio of operating profit to average NIC (average of the opening and closing balances).
- **Net asset turnover:** this is an efficiency indicator that expresses invested capital's ability to transform into sales revenue. It is calculated as the ratio of revenue to average NIC (average the opening and closing balances).

The following terms are frequently used in relation to the company's operations:

- **Multistation Computerised interlocking system:** this is a central management system for control and signalling and station safety.
- **Transport Regulator (ART):** the body in charge of regulating transport and access to related infrastructure along with accessory services.
- **ATC:** Automatic train control. This system automatically controls the train's speed. It is the technological and functional evolution of the automatic train protection (ATP) system.
- **HS/HC:** High speed/High capacity. This is the system of lines and means specifically developed for high speed and/or high capacity transport.
- **Electricity Sector Adjustment Fund:** The public economic body that operates in the electricity, gas and water sectors.
- **Government Programme Contract - Services or Investments:** these are long-term contracts between the MIT and RFI defining investment projects and other terms and conditions, such as ordinary and/or extraordinary network maintenance, to encourage the development of the railway system.
- **Main line:** this is a particularly important series of railway lines in terms of traffic volumes and the transport role that it plays, as it joins major network centres or hubs.
- **DPCM:** Prime Minister's decree.
- **European Railway Agency (ERA):** this is the EU agency establishing the mandatory requirements for European railways and builders in the form of technical interoperability specifications applicable to the European railway system. The ERA sets common safety targets, along with the related methods and common safety indicators, in compliance with Directive 2004/49/EC, as amended.
- **European Rail Traffic Management System (ERTMS):** this is the system that integrates the various railway networks in the EU from a functional and operational standpoint and provides for the European Train Control System.
- **European Train Control System (ETCS):** this is the overall network of the various national automatic train control (ATC) systems. ATC systems consist of traditional and innovative signalling systems.

- **Global System for Mobile Communication - Railway (GSM-R):** this is the European standard for public digital mobile telephony system with a transmission speed of 9.6 Kbps.
- **ICT:** Information and communication technology.
- **MATTM:** Ministry of the Environment and Protection of Land and Sea.
- **MEF:** Ministry of the Economy and Finance.
- **MIT:** Ministry of Infrastructure and Transport.
- **Hub:** this is a conventional term to define a railway area that generally coincides with major metropolitan destinations presenting highly dense and relatively complex medium to large-size stations and other railway plants that are interconnected by various lines, creating a continuation of the main routes into the same hub and other lines, built to manage various traffic flows and alternative routes, or service loops.
- **APG:** Assirevi's preliminary guidance on the IFRS.
- **PIR:** Network Prospectus, containing the criteria, procedures, methods and terms for the allocation of the infrastructure capacity and for the provision of the related services, as well as a detailed presentation of the available infrastructure and access conditions.
- **LC:** level crossing.
- **Operating control line:** a location where there is no passenger service.
- **MAP:** minimum access package.
- **PRG:** general zoning plan.
- **Doubling:** this is the transformation of a single track to a double track.
- **Terminal:** this is the intermodal transport infrastructure for the transfer of large load units between carriers, with or without warehouses of modest size.
- **TLC:** telecommunications.
- **CCS/CTC:** this command and control system/large network central traffic control system regulates traffic on the main lines and hubs, outperforming traditional centralised traffic control systems.
- **TSCS:** train speed control system. This is the first functional stage of the ATC system for constant control over train speed, making it possible to activate the emergency brakes if the train exceeds the maximum speed allowed on the line or if it proceeds past stop signals.
- **Steering support controls – SSC:** they are used to control and manage railway operation on the line from the central control stations in Bologna and Verona.
- **Intermodal transport:** this is transport using two or more modes of transport (road, rail, sea or river) with the transfer of load units from one mode to another without breaking up the load, i.e., using a roadway vehicle or intermodal transport unit (containers, swap bodies and semitrailers).
- **Train-km (tkm):** this is the number of train events per kilometre travelled.
- **RS:** release speed.

2019 HIGHLIGHTS

		2019	2018
ROE	P/E*	0.90%	0.82%
ROI	OP/ANIC	0.99%	0.91%
ROS (OP MARGIN)	OP/R	12.52%	11.18%
GOP/R (GOP MARGIN)	GOP/R	17.18%	16.09%
NET ASSET TURNOVER (NAT)	R/ANIC	0.08	0.08
DEBT/EQUITY RATIO	NFD/E	0.07	0.03

KEY

ANIC: Average net invested capital (average of the opening and closing balances)

OP: Operating profit

GOP: Gross operating profit (loss)

E*: Average equity (average of the opening and closing balances) net of the profit for the year

E: Equity

NFD: Net financial debt

R: Revenue

P: Profit for the year

THE COMPANY

Rete Ferroviaria Italiana S.p.A. (the “company” or “RFI”) carries out its operations and provides its services in compliance with the “principles governing the provision of public services” and the values shared by the entire FS Italiane group.

The main areas of operations carried out by RFI within the scope of the Concession Act and on the basis of the specific sector regulations are:

- the safe management of railway traffic, including via the train speed control and command systems;
- maintaining the efficiency of the national railway infrastructure so that it can be fully used by the transport companies, via ordinary and extraordinary maintenance. Since 2014, together with safety, security and the railway ferry to Sicily and Sardinia, this has been governed by the Government Programme Contract – Services between RFI (as national railway infrastructure operator) and the government;
- the planning and implementation of investments to upgrade the existing infrastructure and its technological equipment, as well as for the development and construction - including via investees - of new railway lines and plants as agreed with the government in the Government Programme Contract - Investments;
- the annual drafting of the railway timetable based on the requests put forward by the passenger and freight railway companies in line with the regulations of the Network Prospectus (“PIR”), the official document through which the national railway infrastructure operator notifies its direct customers of the criteria, procedures, methods and timing for the allocation of the infrastructure capacity and for the provision of the related services;
- ascertaining the mental and physical suitability of personnel - both its own and of the railway companies and other transport sector operators - involved in activities related to the safety of train traffic and railway management, as well as the safety of waterway and land public transport;
- the accessibility of stations and of the station services offered to passengers and, in general, all users in line with the principles and values that guide RFI in its dealing with customers and the public;
- providing assistance at stations to passengers with reduced mobility (PRM) as station manager, a role that the company took on in December 2010 to implement Regulation (EC) no. 1371/2007 on “Rail passengers’ rights and obligations”;
- the accessibility of the freight terminals it owns, including through the integrated offer of access to the infrastructure and the last railway mile services provided via the subsidiary Terminali Italia S.p.A., with a network of 16 terminals throughout Italy;
- the sea link ensuring the continuity of railway services to Sicily by ferrying passenger and freight trains between Villa San Giovanni and Messina, and to Sardinia carried out exclusively at the request of the railway companies for freight trains or transport services;
- integrating the Italian network with the trans-European transport networks in line with the plans and standards defined at supra-national level and as per the programmes carried out in conjunction with foreign infrastructure operators, including as part of the European Economic Interest Grouping (EEIG) and International associations for network interoperability and the development of freight corridors.

RFI figures at 31 December 2019 are shown in the table below:

OPERATING RAILWAY LINES 16,779 km (1)	
Number of employees	26,407
Share capital	31,528,425,067
Local Production Units	15
Local Sales Units	6
Local Traffic Units	11
Workshops	5
Investment Planning Units	7
CLASSIFICATION	
Main lines	6,468 km
Complementary lines	9,361 km
Hub lines	950 km
TYPE	
Double-track lines	7,722 km
Single-track lines	9,057 km
POWER	
Electrical lines	12,016 km
- double track	7,644 km
- single track	4,372 km
Non-electrified lines (diesel)	4,763 km
TOTAL TRACK LENGTH 24,509 km (4)	
Traditional line	23,033 km
HS line (2)	1,467 km
RAILWAY PLANT	
Stations that serve or could serve passengers	~ 2,200
Ferry plant	4
Freight plant (3)	211
INNOVATIVE TRAIN SPEED, REMOTE CONTROL AND PROTECTION TECHNOLOGIES (4)	
Remote control systems for traffic	13,176 Km
TSCS	12,493 km (77 km of which equipped with both TSCS and SSC)
SSC	3,561 km (77 km of which equipped with both TSCS and SSC)
ERTMS for interoperability on the HS/HC network	709 km
GSM-R	11,633 Km

Notes

- (1) 70 km of which on the foreign network
- (2) referring to sections equipped with ERTMS and their connections to other service locations
- (3) plants with intermodal centres, hubs, connections, etc.
- (4) all network lines are equipped with one or more train speed protection systems

Business plan

On 6 February 2019, RFI's board of directors approved the 2019-2023 business plan. Drafted by the operator, this plan forms an integral part of Ferrovie dello Stato Italiana S.p.A.'s business plan and reflects the group's new strategic vision of "focusing more on the core railway business". In line with this vision, RFI has set the strategic goal of contributing to the country's sustainable development and attractiveness by making it a priority to satisfy the mobility needs of people and logistics requirements and increase the country's connectivity and integration.

The operator has planned a series of actions to implement the plan, which cover five priority areas - Stations, Local public transport (LPT), Long-haul, Logistics and Environmental & social aspects - by leveraging four key drivers: Safety, Punctuality and reliability, Performance upgrades, Efficiency, innovation and sustainability.

- **Safety** – The continuous commitment to improving railway safety is central to the plan and consists of pursuing "zero incidents" by devoting human resources, vehicles, processes and work to make the infrastructure more resilient and protect the ground from hydro-geological and seismic risks as land grows increasingly fragile.
- **Punctuality and reliability** - RFI aims to improve punctuality through short, medium and long-term traffic management actions and increase reliability through work on the infrastructure and the technologies used for metropolitan hubs and the highest-traffic lines.
- **Performance upgrades** – Under the plan, substantial efforts will be directed at increasing the capacity and performance of the network and improving connectivity throughout the country. These efforts include:
 - building new lines;
 - upgrading railway medium/long-haul and LPT routes for higher speeds;
 - developing railway connections to additional ports, terminals and airports and upgrading the performance of freight lines, particularly for the core network.
- **Efficiency, innovation and sustainability** – Significant focus is also devoted to the responsible use of public resources based on should-cost analyses and clean sheeting to implement¹:
 - a policy of excellence in procurement, which includes the revision of inventory management;
 - the introduction of innovative infrastructure digitalisation technologies;
 - land protection, regeneration and enhancement (improving water and energy efficiency, recycling materials, putting assets not used in operations to use for social purposes and protecting and training workers) with the engagement of all stakeholders.

¹Analytical model to determine the ideal price of procurement considering the individual sub-components and cost drivers;

TRANSACTIONS WITH THE GOVERNMENT

Following the extensive talks that have begun with the relevant Ministries and in accordance with that established by the Interministerial Committee for Economic Planning ("CIPE") in Resolution no. 4 of 2012, transactions between the company and the government are governed by two contracts:

- Government Programme Contract – Investments (GPC-I), regulating the sustainable planning and funding of investments to develop the railway infrastructure in order to improve service quality and ensure compliance with safety levels in line with technological developments, in accordance with new legislation and the national and EU strategic guidelines for financial planning.
- Government Programme Contract – Services ("GPC-S"), governing the availability of the infrastructure and, specifically, ordinary and extraordinary maintenance on the infrastructure, as well as safety, security and railway ferrying.

The Government Programme Contract – Investments

The procedure for the new 2019-2021 GPC-I was completed on 9 May 2019 when the Court of Auditors registered MIT/MEF Interministerial decree no. 87 of 7 March 2019, approving the contract.

Accordingly, in 2019, after the procedure was completed, the resources envisaged in the contract, totalling €13.2 billion for many investment projects/programmes became available. They include €5 billion for the development of the main railway lines, €2.7 billion to continue construction lot projects and €2 billion to continue safety and legal compliance programmes.

The operator then prepared a joint update for 2018 and 2019 to combine in one authorisation process the additional allocations in the 2018 and 2019 Budget Acts, which the government had approved in the meantime, and quickly put the resources to use.

Specifically, the 2018/2019 update to the CDP-I considers resources from:

- Law no. 205 of 27 December 2017 (the 2018 Budget Act), which refinanced the fund pursuant to article 1.140 of Law no. 232 of 11 December 2016 (the 2017 Budget Act), allocated to the various Ministries with the DPCM of 28 November 2018, in which €5.9 billion was allocated to the operator;
- Law no. 145 of 30 December 2018 (the 2019 Budget Act), which established a fund in the MEF's budget (chapter 7557) to relaunch investments by the government's central administrations and develop the country (pursuant to article 1.95/96/98), allocating €7.3 billion to the operator.

In the second half of the year, RFI implemented the observations in the preliminary stage and prepared a revised version of the 2018/2019 update, which the CIPE approved in resolution no. 37 of 24 July 2019. This update, in order to provide annual input for the knowledgeable calculation of resources in the government budget, includes a new document called the Investment Priority Assessment and Plan ("IVAP"), which sets the following objectives:

- specify the reasons, criteria and methods for the assessment of the specific type of railway investments agreed in the Government Programme Contract, based on a combined analysis of the context and horizon, the conditions of the railway network and the country's and the individual regions' need for infrastructure and, in general, sustainable development and mobility in a European and global context.

- report the results of the systematic and systemic assessment of all the individual investments that require funding and highlight the importance of each in reference to achieving the strategic objectives;
- provide an immediate picture of each investment's multi-dimensional placement (what, where, why and how much) within the overall framework of the network upgrading and development strategies, which can also prove useful in any subsequent examinations of the individual investments.

In addition to illustrating the dimensions of the existing network upgrading programmes in terms of the allocation of resources based on their feasibility, the assessment conducted using the IVAP is aimed at identifying network development projects to better connect the country that are eligible - because of their maturity and expected technical/performance returns - for inclusion in the investments with funding priority in the proposed update to the GPC-I. Starting from this first edition, the IVAP will be updated on a rolling basis when the government budget drafting process begins.

The project backlog in the 2018/2019 update to the 2017-2021 GPC-I amounts to approximately €79.2 billion, compared to €66.0 billion in the 2017-2021 GPC, considering the changes in the portfolio as a result of completed works (€2.2 billion) and the changes in funding (€15.4 billion). In accordance with the development strategy for the national railway network, the resources established in the contract will ensure the safety and modernisation of the existing railway infrastructure in order to provide people with more efficient and safer infrastructure and a higher quantity and quality of commuter services. In addition, they will relaunch railway freight transport and intermodality by focusing network development on intermodal hubs to provide better access to ports, interports and airports and dedicating utmost attention to the development of the regions in Southern Italy, which have been allocated roughly 51% of new resources.

Specifically, the new resources established in the contract, totalling €15.4 billion, are allocated as follows:

- €2.5 billion to continue work to make the lines safe;
- €1.8 billion to continue installing ERTMS and to update the lines and railway plant technologically in order to improve efficiency in response to growing demand for mobility and eliminate old and obsolete technologies;
- €0.1 billion to restore and reopen the tourism lines indicated in Law no. 128 of 2017 considering the vital importance attributed to tourism as a driver for Italy's economic development;
- €1.1 billion to upgrade the regional networks for the relaunch of LPT, including the performance of projects identified jointly with the regions, mainly within the I and II Addenda to the Italian Cohesion and Development Fund's 2014-2020 operating plan for infrastructure;
- €1.5 billion for the development of metropolitan areas, and particularly for the Smart and Easy Station programme;
- €0.2 billion to develop modal integration, also in accordance with article 1.749 of the 2019 Budget Act: "in the update to the 2017-2021 Government Programme Contract - Investments between the Ministry of Infrastructure and Transport and Rete Ferroviaria Italiana S.p.A., a portion of the resources to be established in the contract or that become available for the purposes already specified in the current contract, within the limit of €100 million per year for 2019 and 2020, is allocated for the development of railway connections eligible for European financing to exploit mobility hubs that are at least supra-regional, prioritising those connected to ports or airports".

- €6.7 billion for investments to ensure network connectivity across all the main inter-hub lines on the core corridors of the Trans-European network-T ("TEN-T");
- €1.5 billion for investments to develop the European corridors with the completion of the financing of the Naples - Bari route on the Scandinavian-Mediterranean corridor.

In December 2019, the Court of Auditors registered CIPE resolution no. 37 of 2019 containing the approval of the update to the 2017-2021 GPC-I, and it was subsequently published in the Official Journal no. 7 of 7 January 2020.

Under the contract approval process, the competent Parliamentary Commissions examine the contract to give their approval before the document can be signed. Next, the MIT and MEF must issue an Interministerial decree approving the contract, which the Court of Auditors will register.

In 2019, the following regulations were issued with an impact on future contractual updates. On 26 October 2019, Law decree no. 124 ("Tax decree") containing "Emergency tax measures and for urgent requirements", converted into Law no. 157 of 19 December 2019. In article 40, it authorises expenditure of €460 million for 2019 for infrastructure investments in the national railway network, specifying how the financing will be covered.

Law no. 160 "Government budget for 2020 and three-year budget for 2020-2022" (the 2020 Budget Act) was issued on 27 December 2019. In article 1, it: a) established a fund in the MEF's budget to relaunch investments by the government's central administrations and develop the country; b) authorised expenditure for investments in the traditional network, including extraordinary maintenance, which was decreased by €40 million in 2020 and increased by €40 million in 2021 and by €350 million in 2026.

The cash allocations for 2020 in the 2020 Budget Act total €4,537.3 million and are entirely funded by the chapters of the budget allocations to the MEF (chapter 7122 for railway investments and chapter 7124 for the HS/HC and traditional networks).

Furthermore, the company has met the current reporting obligations of the 2017-2021 Government Programme Contract – Investments, specifically:

- article 4.2.h) concerning the annual transmission of a report to the Ministry indicating the appointment of tender commissions or technical/administrative inspection assignments for contracts worth more than €25 million;
- article 4.3.a) relating to the annual transmission of the report on the implementation status of the investment programmes and projects covered by the contract;
- article 6, which governs the operator's powers and to which reference should be made;
- article 7.3, which requires the operator to provide information to the Supervisory authority on public contracts for works, services and supplies, as well as data and information on any litigation concerning the contract assignment or awarding procedures for works, as well as the progress of any contracts worth more than €25 million;

- article 8, concerning the communication of annual performance targets and the assessment of performance of the previous year, using a calculation method agreed with the relevant Ministries and attached to the Report on the Government Programme Contract.

Government Programme Contract - Services

The Government Programme Contract – Services (GPC-S) governs the funding of network operations and extraordinary maintenance to ensure safe and reliable network conditions through ordinary and extraordinary maintenance and the funding of other railway operating costs (traffic, safety, security and railway ferry operations) and assistance services for PRM.

After the 2016-2021 Government Programme Contract - Services was finalised on 2 October 2017, the framework of originally agreed resources was modified by Law no. 205 of 27 December 2017 (Government budget for 2018 and the three-year budget for 2018-2020), Law decree no. 119 of 23 October 2018 (converted into Law no. 136 of 17 December 2018) and Law no. 145 of 30 December 2018 (Government budget for 2019 and three-year budget for 2019-2021), as previously mentioned in the 2017 and 2018 annual reports to which reference should be made, by Law no. 160 of 27 December 2019 (Government budget for 2020 and the three-year budget for 2020-2022), which had allocated €100 million for 2020, 2021 and 2022 to restore the resources allocated for grants related to income that had been de-funded by law no. 205 of 27 December 2017, and because of the financing under the 2007-2013 national operating plan, which allocated an additional €26.53 million for extraordinary maintenance.

The modified financial framework under current legislation will be implemented in a specific update to the contract, which will formalise the resources allocated by Law no. 111 of 28 September 2018, which refunded “expenses for passenger transport by sea in the Messina Strait” using funds from the MIT’s budget chapter 7255, the resources allocated under article 1.239 of Law no. 190 of 23 December 2014, refinanced by Law no. 145 of 30 December 2018 (Government budget for 2019 and three-year budget for 2019-2021), totalling €7.1 million to cover the costs of providing the high-speed passenger transport service on the Messina - Reggio Calabria route from 1 October 2018 to 31 December 2019, which RFI guaranteed upon the MIT’s specific request.

LEGISLATIVE AND REGULATORY FRAMEWORK

RFI’s inclusion in the list of institutional units that belong to the sector of the general government, prepared by the Italian statistics institute (ISTAT)

On 30 September 2019, the ISTAT measure containing the list of institutional units belonging to the general government sector was published in the Official Journal – General series no. 229. The list included, for the first time, RFI.

The reasons for RFI’s inclusion in the general government sector and the effects of this classification are described below.

Based on the European system of accounts (ESA 2010) pursuant to Regulation (EU) no. 549 of 2013 and in light of the ESA interpretations provided by Eurostat in its Manual on Government Deficit and Debt, ISTAT is required, under article 1.3 of Law no. 196/2009 to prepare and publish each year, in the Official Journal, the list of

institutional units belonging to the sector of the “general government” (ESA sector S.13) and, therefore included in the general government’s income account.

The legal status of an institutional unit is not considered for the purposes of its classification in the S.13 sector, meaning that this sector may not only include public administrations in the strictest sense, but also the subsidiaries of a public administration provided that the goods and/or services that it produces are not destined for sale or that the revenue from sales does not cover at least half of the production costs. To verify that institutional units meet these conditions, ISTAT conducts the market/non-market test on them. If the results of the test show that sales on the market do not cover at least 50% of production costs for a “fair period of time”, the institutional unit in question is considered a producer of non-market services and consequently included in the scope of the general government.

In releases dated 3 and 9 April 2019, ISTAT announced that it had decided to reclassify RFI, among others, and include it in the list of ESA S.13 institutional units to be published.

This was the consequence of the results of the market/non-market test that had shown, unlike in previous years, a market revenue/cost ratio of less than 50%. The data used to calculate this indicator were not taken directly from RFI’s financial statements but instead restated based on specific parameters, as described below.

On 5 August 2019, Eurostat published its “Final Findings – EDP Dialogue visit to Italy” in which it describes the preliminary process conducted with ISTAT in November 2018 which resulted in the findings of the market/non-market test on, *inter alia*, RFI. The paragraph on RFI shows that the operator did not pass the test as a result of ISTAT having changed the classification/calculation method for the following captions:

- (i) revenue from the Government Programme Contract - Services (GPC-S), which was previously considered subsidies on products and, therefore, the equivalent of market revenue, was then subsequently considered subsidies on production, and therefore classified with government grants;
- (ii) toll revenue, which is no longer considered effective market revenue, but rather proceeds covering the portion of costs not covered by the GPC-S;
- (iii) network depreciation, which was restated according to the perpetual inventory method of ESA 2010 by “grossing” the amount of assets with the value of the grants related to assets (“investment grants”), calculated as the average of the grants for the period based on the 2014-2017 Government Programme Contract - Investments.

On 29 July 2019, RFI submitted a request with ISTAT to access the preliminary documents of the administrative proceedings that resulted in the company’s reclassification in Sector S13. It re-submitted the request on 6 August 2019 after receiving a generic reply from the institute with a note on 2 August 2019.

RFI appealed against ISTAT’s explicit and implicit refusal before the Lazio regional administrative court on 30 September 2019.

With respect to the effects of the company’s inclusion in the scope of the general government, which would normally make it subject to public spending limitations and obligations, under article 40 of Law decree no. 124/2019, converted into Law no. 157/2019, these limitations and obligations do not apply to RFI, thereby guaranteeing the company’s continued financial and operational independence, which is necessary to efficiently perform its operations in the pursuit of institutional and corporate objectives.

TRANSPORT AUTHORITY

In 2019, the Transport Authority (ART) issued several, particularly significant decisions that characterised the regulatory context in which the operator and the railway companies operate.

ART decisions nos. 42 and 130 of 2019

With decision no. 42 of 12 April 2019, the ART began a public consultation on the outline of the regulation containing "Measures concerning access to service plant and railway service", in line with the Italian and European regulatory framework since, in particular, Implementing Regulation (EU) no. 2017/2177 would fully come into force in June 2020.

Following the public consultation, in which RFI participated by presenting its observations and proposed changes, on 1 October 2019, the ART published decision no. 130, containing the definitive regulation.

All plant relating to the national railway network and the railway networks listed in attachment A to the MIT decree of 5 August 2016 used to provide non-MAP services fall within the objective scope of application of the ART's measures in this decision. Subjectively, the measures apply to infrastructure operators, service plant owners, providers of railway services performed in the service plant and connection contract applicants.

The purpose of decision no. 130/2019 is to define a regulatory framework for access to service plant and the services performed therein, in order to ensure that plant operators offer their services to all railway, road transport and logistics companies at fair, non-discriminatory and transparent conditions.

In addition to the general-scope measures that require, for plant operators: (i) a system of guaranteeing minimum service levels, along with penalties in proportion to the fee for services sold; (ii) specific disclosure obligations; and (iii) deadlines for replying to access requests, other measures apply to specific services. Of these measures, the following have a particularly important impact on RFI and its subsidiaries GS Rail and Terminali Italia:

- (i) the station manager must prepare a station plan for passenger stations and the scope of the regulation includes, with the consequent obligation to prepare specific tariffing, assistance and greet services and the advertising space available to the railway companies;
- (ii) specific requirements for shunting services concerning contexts in which there is one single operator and the organisation of services at border stations;
- (iii) the obligation for the operator to carry out ordinary maintenance on railway connections within the railway enclosure and move rolling stock within the same enclosure during line opening hours.

After decision no. 130/2019 was issued, RFI set up specific task forces for the implementation of all the requirements affecting the various company processes within the deadlines.

ART decisions implementing Piedmont regional administrative court rulings nos. 1097 and 1098 of 2017

The 2018 directors' report provided information on the commencement of the procedure for the revision of the operator's tariff plans and the instructions that the ART had given RFI in decision no. 110/2018.

In its note of 4 February 2019, expressing its assessments on the procedure, in accordance with ART decision no. 110/2018 and considering the contractual restrictions in place with the other FS Italiane group companies, RFI considered taking specific action to protect itself against the effects of decision no. 110/2018, if they were confirmed.

On 15 February 2019, the ART published decision no. 11/2019, imposing a series of adjustments for the operator to make so that - implementing the Piedmont regional administrative court's rulings nos. 1097 and 1098 of 2017 - the 2016-2021 tariff system for the MAP and for non-MAP services would be fully compliant with the criteria for determining the fees to access and use railway infrastructure, as approved in ART decision no. 96/2015.

Based on these adjustments (and extending the deadline for the completion of the procedure to 28 June 2019), RFI was therefore required to:

- a) prepare the updated tariff system for the period from 1 January 2019 to 9 December 2021 in order to, *inter alia*, publish the consequent extraordinary update of the 2019 and 2020 PIRs;
- b) recalculate the MAP fees for 2018 only and the consideration for non-MAP services for 2017 and 2018 only and, consequently, apply the adjustments "to the benefit of the railway companies party to the effects of Piedmont regional administrative court rulings nos. 1097 and 1098 of 2017, agreeing how to implement these changes with the rightful parties".

As a result of that indicated above, RFI sent, within the deadline, the updated tariff system for the period from 1 January 2019 to 9 December 2021, which the ART subsequently approved with decision no. 23 of 28 March 2019. Subsequently, RFI published the updates to the 2019 and 2020 PIRs, which contained adjustments to the tariff systems for both the MAP and non-MAP services, which the ART declared to be compliant in decision no. 43/2019, which was published on 18 April 2019, concluding the procedure that began with decision no. 138/2017 implementing the Piedmont regional administrative court's rulings nos. 1097 and 1098 of 2017, with respect to the revision of RFI's tariff system.

Additional information on relationships with the ART is provided in the paragraphs on "Transactions with the government" and "Litigation and disputes".

PARTNERSHIP BETWEEN THE EUROPEAN RAILWAY INFRASTRUCTURE OPERATORS

In 2019, RFI took part in several international meetings for the development of the European freight corridors. The following updates are noted:

Rhine-Alpine Rail Freight Corridor

In 2019, the European Commission named the Rhine-Alpine corridor for a pilot project on the harmonisation of application procedures for cancellation penalties in the event of interruptions due to force majeure affecting the circulation of international trains. A task force was set up to harmonise the railway traffic management procedures along the Brenner line.

Scandinavian-Mediterranean Rail Freight Corridor

In September 2019, the Scandinavian-Mediterranean corridor held an extended consultation meeting with the railway companies interested in using the corridor, in which a proposal was made to reinforce the procedures for traffic management along the Brenner line.

In addition, after a pilot project was kicked off to integrate RFI's and the Verona Quadrante Europa terminal's commercial offer, the corridor extended this pilot project to include another two terminals, which will be integrated in the 2022 commercial offer.

Baltic-Adriatic Rail Freight Corridor

In 2019, the Baltic-Adriatic corridor began a capacity analysis to identify a methodology to support infrastructure operators, terminals, railway companies and the executive boards in the definition of a commercial offer for the railway that attracts future freight flows.

Mediterranean Rail Freight Corridor

During the second half of 2019, the Mediterranean corridor played an active role in the application of ICM (International Contingency Management) procedures to the Lione - Modane line between 3 July and 22 July 2019 and the Sete - Besier line between 23 October 2019 and 25 November 2019, supporting the infrastructure operators involved in terms of communication to the railway companies and the identification of available and internationally harmonised rerouting resources.

Serving on the executive boards of the Baltic-Adriatic and Mediterranean corridors, in 2019, RFI proposed a pilot project to analyse the feasibility of creating a control room for international freight traffic along the corridor. The European Commission began a consultation process in which RFI presented a position paper based on three key pillars: strengthening cooperation between the various international logistics chain players, expanding the role of the corridor's single office for the allocation of capacity and the development of traffic management functions in the corridor (in line with the proposed pilot project above).

PRIME (Platform of Rail Infrastructure managers in Europe)

RFI has been a member of PRIME (Platform of Rail Infrastructure Managers in Europe) since 2015, which held its half-year plenary session on 18 November 2019 in Brussels (Belgium). During the session, European infrastructure operators and the European Commission discussed two strategic topics:

- innovation projects endorsed by the railway sector;
- railway transport's role in supporting EU climate change policy.

The first discussion panel stressed the importance of innovation in the railway sector and how new technologies (5G, satellite networks, drones and artificial intelligence) can play a crucial part in improving the efficiency of railway transport. In this respect, the European Commission recognised Rail Net Europe's international timetable revision (TTR) process as a positive example of innovation in the railway sector.

In the second discussion panel, the European Commission emphasised the need to intensify efforts to make railway transport increasingly greener and to help create a circular economy that makes Europe the first carbon neutral continent by 2050. In this context, a few members of PRIME, including RFI, presented decarbonisation initiatives/projects they are working on.

Rail Net Europe (RNE)

The RNE general assembly was held on 4 December 2019 in Vienna, during which members discussed and approved developments in certain projects in which RFI is directly involved. Specifically:

- a project to implement the new international TTR. RFI is directly involved with its IT experts to develop systems that can digitally manage multi-annual tracks, with its legal experts to define a harmonised plan integrating the legal and contractual aspects of the TTR in the PIR and with its commercial experts to prepare new commercial terms for the new capacity offer.
- a pilot language programme between RFI and OBB INFRA via Tarvisio which will use the computer translation system provided by RNE to test the translation of predefined messages between drivers and traffic controllers from Italian to German and vice versa. A test case involving the railway companies will be conducted in 2020 on the Baltic-Adriatic Rail Freight Corridor.

In November 2019, RFI participated in the Fora Meetings in Brussels for the corridors of the central TEN-T (four of which directly concern Italy). Required by Regulation (EU) no. 1315/2013, the meetings provided an update on the design and financial maturity of investments in each corridor. The list of investment projects will be the basis of the fourth corridor work plan, which will give an up-to-date overview of compliance with the TEN-T parameters for corridors and will indicate whether there are any operational and/or administrative barriers preventing or slowing the completion of the TEN-T by 2030.

CUSTOMER RELATIONS

General information

As national railway infrastructure operator pursuant to Legislative decree no. 112/2015, RFI operates on a market that consists of railway companies and applicants. The latter, in addition to the railway companies, Regions and autonomous provinces, also include “the competent authorities under the European Parliament and Council regulation no. 1370/2007, loaders, shipment agents and combined transport operators, with a public service or business interest in acquiring infrastructure capacity for the purposes of providing railway transport services (article 3 of Legislative decree no. 112/2015).” The contract concerns, in the case of the former, standard hours and services – Contract to use the infrastructure with a term not exceeding the validity of a timetable, and in the case of the latter, the infrastructure’s capacity in general terms or overall volumes, rather than in detail – Long-term master agreement.

Infrastructure use contracts

During the year, 42 infrastructure use contracts were signed, 19 of which for passenger traffic, 22 for freight traffic and one for technical runs used to test rolling stock.

At 31 December 2019, 33 master agreements were pending with the regions, autonomous provinces, railway companies and other parties with a commercial interest in the infrastructure.

With specific regard to the period from 1 January 2019 to 14 December 2019, the market presented:

- 39 railway companies with valid railway licences issued by the MIT (including six for traffic originating/terminating in Italy only);
- one railway company with a European railway licence issued by the German authority (TX Logistik);
- 37 railway companies (36 after 15 December 2019) that performed transport services after signing an infrastructure use contract.

Infrastructure access and PIR

In February, in accordance with ART decision no. 118/2018, RFI published the following information on PIR WEB:

- the punctuality limits within which a train in a given market segment is considered on time;
- the punctuality indicators;
- the internal procedures for the attribution of reasons for a delay and the resolution of the resulting disputes;
- the integration of the technical attachment on rescue trains, specifying the exact location, time needed to prepare the train to be put on the line after the operator’s formal request, the type of train and features, the responsible railway company and the type of rolling stock that can be rescued;
- the stations and stops with barriers to the train platforms or in which, in general, only travellers with tickets may access the platforms.

In May, in accordance with ART decision no. 43/2019, which approved the tariff system that RFI had proposed in the procedure commenced with ART decision no. 138/2017, the MAP and non-MAP service tariffs in the 2019 and 2020 PIRs were updated.

To implement the measures in ART decision no. 106/2018, RFI presented an action plan for the period from 2019 to 2024, consisting of:

- a) the preparation of a layout for the poster illustrating users' minimum rights, the accessibility and usability of stations and the ways in which RFI provides information;
- b) the start of the project to expand the SalaBlu app to all users, including information on train delays and cancellations and out-of-order lifts with the expected time to restore them to working order;
- c) the publication of the parametric function for calculating indemnities for PRM in RFI's service charter and the inclusion of a procedure in the PIR for railway companies to claim reimbursement from the operator for the indemnities;
- d) the creation of a dedicated page and its publication on RFI's website for end users where they can find information on train delays and cancellations;
- e) the creation of a dedicated page and its publication on RFI's website for end users where they can find information on the usability and accessibility (including lift operation) of stations;
- f) an analysis of station usability (i.e., bathrooms, lifts and waiting areas);
- g) an analysis of the feasibility and sustainability of a chatbot that would provide information on users' rights, train delays and cancellations and out-of-order lifts;
- h) the installation of posters in stations providing the information in letter a);
- i) the implementation of the remote management system for RFI's lifts.

RFI partly performed the actions in letters a), b), c) and d) in 2019.

On 28 June 2019, pursuant to article 14 of Legislative decree no. 112/2015, the first draft of the 2021 PIR was published on RFI's website and on 13 December 2019, the extraordinary update of the 2020 and 2021 PIRs were published, confirming part of the first draft and implementing the ART's requirements and instructions as per ART decision no. 151/2019. The main changes consisted of the following:

- Traffic penalties: in accordance with requirement 6.3.4 of ART decision no. 140/2017, the operator introduced "traffic penalties" to compensate the railway companies for a reasonable amount in proportion to damage suffered. This is also in accordance with ART decision no. 151/2019.
- Rules for the use of the network: since the use of the HS/HC hubs and lines is currently high, leading to a decline in performance in terms of the regularity and punctuality of both services sold on the market and regional services, RFI has rolled out new rules for the use of the network to optimise line and plant capacity and to improve performance in general. Accordingly, with these rules, RFI aims to optimise capacity so the timetable can be developed and subsequently managed with the necessary modelling and standardisation of the offer.
- Procedure for negotiating PRM indemnity requests: in compliance with the measures in ART decision no. 106/2019, RFI and the railway companies have introduced a procedure for the handling of indemnity requests from PRMs who have used services bound by public service obligations ("PSO") following the unavailability of lifts reported by RFI and not restored within the amount of time indicated.

- Personalised public information: a specific regulation was introduced for the way in which the railway companies may request the personalisation of commercial information provided to the public. The commercial use of public information generates significant costs for the operator in terms of updating and developing systems, which must be recharged to the railway companies (as per paragraph 6.3.4). RFI will assess both the feasibility of the requests, considering the technical and regulatory restrictions applicable to the provision of the information, and the compatibility of the audio and video content with the rights of users to receive adequate, clear and complete information at stations.
- Supply of electrical energy for traction: starting in April 2019, in accordance with the requirements of ART decision no. 140/2017, the estimated unit cost of energy for traction, pre-heating, air-conditioning and the use of electrical carriage heating for maintenance and cleaning on passenger trains and for parking is published each quarter on PIR WEB, in order to calculate and invoice them in the following quarter as services related to the cost of energy.

On 15 December 2019, the new ePIR portal officially began operating, replacing the previous PIR WEB. Georeferenced maps on the characteristics of lines, plant and technical/commercial information relevant for the market on which RFI operates as infrastructure and service plant operator are published on ePIR, which supplements the PIR.

SERVICES PROVIDED BY THE INFRASTRUCTURE OPERATOR

The services provided by the infrastructure operator, broken down as per article 13.2 and following articles of Legislative decree no. 112/2015, are summarised below.

Minimum access package (MAP)

The infrastructure operator receives access fees for use of the infrastructure and ensures all railway companies that have been allocated train hourly path hours are provided with the following services comprising the MAP, at fair and non-discriminatory conditions:

- a) processing of the requests for railway infrastructure capacity in order to sign the infrastructure use contracts: this includes all preliminary activities necessary for the signing of contracts with the railway companies;
- b) right to use assigned capacity;
- c) use of the railway infrastructure, including interchanges and connectors;
- d) control and regulation of train traffic, signalling and routing, as well as the communication of any information on train traffic management;
- e) use of the electrical system for train traction, where available;
- f) all other necessary information to provide or manage the service for which capacity has been granted;
- g) the sea link to/from Sicily (Villa S. Giovanni - Messina) and Sardinia (Villa S. Giovanni/Messina - Golfo Aranci);
- h) infrastructure connecting to the service plant.

Tolls generated a slight increase in revenue in 2019 (+0.5%) following the roughly 2% rise in traffic volumes (train-km), offset by the impact of changes to the tariff system approved with ART decision no. 43/2019.

Revenue from sea transport grew by roughly 1.6% on 2018 and refers entirely to Sicily, since no connections were operated with Sardinia.

Plant with guaranteed access and related services

As the service plant manager, RFI provides all railway companies with fair, non-discriminatory and transparent access, including to the railway lines, the following service plants, where applicable, and related services:

- a) passenger stations, with respect to structures for travel information systems, adequate spaces for ticketing and other structures functional and necessary for railway operation;
- b) freight terminals;
- c) areas for composition/decomposition of trains, including space for shunting;
- d) areas, plant and buildings to park, shed and store and depot rolling stock and freight;
- e) maintenance centres, except for the heavy maintenance centres reserved for high-speed trains and other types of rolling stock that require specialised centres;
- f) washing sidings;
- g) refuelling areas;
- h) infrastructure clearance using specially-equipped rescue vehicles.

On a like-for-like basis, revenue from these services decreased by roughly 12% on the previous year, almost entirely due to the parking of rolling stock, since RFI began using calculation tools to more accurately report it. At the same time, the reporting scope of these services was expanded to include the station spaces housing former Centostazioni plant, as well as infrastructure clearance services.

Additional services

As service plant operator, RFI provides the following additional services to the railway companies upon their request, at fair, non-discriminatory and transparent conditions:

- a) supply of electrical energy for traction: in 2019, RFI began testing the virtual metre before using it in operations. It is an algorithm that estimates the amount of energy that a train consumes on a given route based on the train's characteristics. The estimated energy consumption of each train will be used as the input to allocate the cost of energy to the railway companies beginning in 2020.

To help the railway companies better plan the supply of electrical energy for traction in view of the upcoming roll-out of the virtual metre, slated to begin with the 2019/2020 service schedule, in 2019, RFI provided them with data on the cost of energy in terms of €/electric km and €/kWh. In the second half of 2019, RFI also offered the railway companies reporting software that includes the virtual metre's estimate of energy consumption per train;

- b) pre-heating, air-conditioning and power for on-board systems for the maintenance and cleaning of passenger trains and water on trains;
- c) traffic control for trains transporting freight classified as hazardous according to the PIC WEB IT system;
- d) traffic assistance with special trains carrying exceptional loads requiring specific authorisation to operate, the modification of infrastructure, etc;
- e) shunting services at border plants and at the plants functional to the ferrying of passenger and freight trains;
- f) assistance to people with disabilities and reduced mobility (PRM);
- g) parking;
- h) fast track.

Revenue from additional services decreased by around 13% in 2019, substantially due to the reduction in shunting services at passes, as part of the process to progressively have the railway companies handle shunting

on their own. However, assistance to PRM was an exception, with revenue up by roughly 13% due to higher demand from the railway companies thanks to the effective ReteBlu IT system.

Auxiliary services

As service plant manager, RFI can, at the request of the railway companies, provide the following auxiliary services at fair, non-discriminatory and transparent conditions:

- a) supply of complementary information such as loudspeaker announcements and the production of posters;
- b) access to the GSM-R telecommunications network for ground/train service links.

Revenue from auxiliary services increased by approximately 11% in 2019 on the previous year because of the higher demand for complementary information from railway companies.

MAIN EVENTS OF THE YEAR

March

Envision certification

On 12 March 2019, RFI received the highest possible level - platinum - of Envision certification for its project to upgrade the Frasso Telesino - S. Lorenzo section of the HS/HC Naples - Bari railway route. Recognised as an example of highly sustainable infrastructure, this project was the very first in Europe to be certified by Envision, which is widely used abroad to assess and calculate the tangible value of the economic, environmental and social sustainability of infrastructure.

Tax consolidation scheme

On 26 March 2019, RFI's board of directors resolved to extend participation in the national tax consolidation scheme for the 2019-2021 three-year period, which, unless revoked, is renewable by tacit consent pursuant to article 117.3 of Presidential decree no. 917/1986, by RFI (as consolidated company) as an option with Ferrovie dello Stato Italiane (as parent).

Sale of the investment in Centostazioni Retail S.p.A.

On 28 March 2019, RFI and FS Italiane S.p.A. sold their investments in Centostazioni Retail S.p.A. to ALTACSRETAILFR S.r.l.. RFI generated a gain of approximately €6 million on the sale and agreed a long-term contract whereby Centostazioni Retail S.p.A. receives the exclusive right of economic use of the retail areas in the five stations covered by the contract, in exchange for which RFI receives a fee in proportion to Centostazioni Retail S.p.A.'s turnover.

April

Amendment to RFI's by-laws

During the extraordinary meeting on 5 April 2019, RFI's shareholder approved an amendment to the by-laws, expanding the company's corporate purpose to include: (i) the operation of railway links by sea between Sicily and the peninsula using "high-speed boats"; (ii) designing, building, operating, managing and maintaining regional railway infrastructure under Legislative decree no. 422 of 19 November 1997, including the equipment,

areas and assets that are strictly related to and necessary and functional for such operation, in accordance with the provisions of article 47.4/11-*bis* of Law decree no. 50/2017. Furthermore, RFI's railway transport safety obligations were revised for compliance with the legislation currently applicable to the sector and the references to the previous Legislative decree no. 188/2003 were updated to Legislative decree no. 112/2015, which now applies.

ISTAT communication on RFI's inclusion in the sector of general government

On 9 April 2019, ISTAT announced that it had revised the scope of the general government sector to include additional institutional units in the scope of those belonging to the general government sector, including RFI.

Acquisition of Terminali Italia S.r.l.

On 10 April 2019, RFI acquired the entire non-controlling investment that Mercitalia Intermodal S.p.A. held in Terminali Italia S.r.l..

Long-term sustainability goals

On 17 April 2019, RFI's board of directors approved the implementation of the group's long-term sustainability goals (2030-2050) defined during the stakeholders' panel organised at the behest of the group's Sustainability Committee. Reference should be made to the paragraph on "Governance, 2030-2050 sustainability goals and action areas".

May

The subsidiary Blu Jet S.r.l.'s operations

On 1 May 2019, Blu Jet S.r.l. began operations as a result of the partial demerger of Blufferies S.r.l.'s business unit for the Villa S.G. - Messina connection using high-speed boats. The notary deed for the demerger had been signed on 27 March 2019 and, in article 2, set 1 May as the date when the real, accounting and tax effects of the transaction would begin.

On the same date, RFI transferred to Blu Jet S.r.l. the Reggio Calabria - Messina connection service using high-speed boats, to be operated as the current operator Blufferies S.r.l. had until 30 April 2019.

Tunnel Ferroviario del Brennero S.p.A. share capital increase

During the extraordinary meeting on 27 March 2019, Tunnel Ferroviario del Brennero S.p.A.'s shareholders approved a cash capital increase of €120 million, offered to shareholders on a pro rata basis. RFI subscribed the capital increase and paid its share of €105,84 million on 17 May 2019. It also announced that it would exercise its pre-emption right to any residual unexercised share options and, on 13 June 2019, paid another €6.5 million for the options not exercised.

VAT refund

The company collected the 2017 VAT asset of €109,327 thousand on 29 May 2019.

June

Safety authorisation

On 14 June 2019, the Italian Agency for Railway Safety (ANSF) issued the five-year renewal of RFI's safety authorisation, which includes the railway infrastructure in Umbria. Required by Directive 2004/49/EC², transposed into Italian law with Legislative decree no. 162 of 2007³, the safety authorisation was originally issued to RFI on 30 June 2014.

Acquisition of UM Ferro S.r.l.

On 12 June 2019, RFI acquired 100% of UM Ferro S.r.l., the vehicle that Umbria T.P.L. e Mobilità S.p.A. had set up and to which it had contributed its infrastructure operation business unit.

On the following 24 June 2019, an agreement was signed for the merger of UM Ferro S.r.l. into RFI, with effect on 1 July 2019, the last step in RFI's takeover of management of Ferrovia Centrale Umbra.

Implementation of the technical pillar in the Fourth Railway Package

Legislative decree no. 50 of 14 May 2019 went into force on 16 June 2019, transposing into Italian law Directive (EU) 2016/798 on railway safety and implementing part of the technical pillar of the Fourth Railway Package (Official Journal no. 134 of 10 June 2019).

On 25 June 2019, the implementation of this technical pillar was completed with the publication in Official Journal no. 147 of 25 June 2019 of Legislative decree no. 57 of 14 May 2019, transposing into Italian law Directive (EU) 2016/797 on the interoperability of the EU's railway system.

Definitive design of the "Naples-Bari route: Laying of double tracks on the Frasso Telesino-Vitulano section"

On 27 June 2019, the extraordinary commissioner issued ordinance no. 44, concerning the approval of the definitive design for the Naples-Bari route: Laying of double tracks on the Frasso Telesino-Vitulano section, 3rd functional lot of the San Lorenzo Maggiore - Vitulano line.

Law no. 55/2019 "Restart work sites"

Law no. 55 of 14 June 2019 went into force on 18 June 2019, converting into law, with amendments, Law decree no. 32 of 18 April 2019, containing emergency measures to relaunch the public contract sector, accelerate investments in infrastructure, urban regeneration and rebuilding after seismic events. In order to rapidly restart work on the Genoa railway hub and ensure the connection of the last mile between the third Giovi Pass and the old port of Genoa, article 4.12 of this law combines the "Strengthening of the Voltri-Brignole infrastructure", "HS/HC Milan - Genoa line: Third Giovi Pass" and "Strengthening of the Genoa - Campasso line" projects into one project, fully funded using the resources of the RFI's Government Programme Contract. The law authorises the start of work on the sixth construction lot for the "HS/HC Milan - Genoa line: Third Giovi Pass" using the resources already assigned to RFI for the Government Programme Contract - Investments.

July

Admission to the cooperative compliance scheme

²Repealed by Directive (EU) 2016/798 of the European Parliament and of the European Council of 11 May 2016 on railway safety"

³Repealed by Legislative decree no. 50 of 14 May 2019, "Implementation of Directive 2016/798 of the European Parliament and of the European Council of 11 May 2016 on railway safety"

With the measure dated 9 July 2019, the Tax Authorities admitted RFI - at the same time as FS Italiane and Trenitalia - to the cooperative compliance scheme introduced with Legislative decree no. 128 of 5 August 2015 ("Provisions on legal certainty in relationships between the tax authorities and taxpayers, implementing articles 5, 6 and 8.2 of Law no. 23 of 11 March 2014").

The scheme is based on the corporate governance bodies adopting a "Tax risk recognition, measurement, management and control system" (the "tax control framework"), which consists of a series of tools, organisational units, company rules and procedures to minimise tax risk by applying the appropriate safeguards. The board of directors adopted RFI's tax control framework with its resolution of 26 June 2019 in the form of a tax strategy, which identifies the company's tax management objectives, defines the risk management parameters and clarifies the conduct rules to be followed, and the tax risk control model, which defines the tax risk control process.

August

Partial demerger of RFI's ICT business unit to FSTechnology S.p.A.

With effect on 1 August 2019, RFI demerged its ICT business unit to the newly-established related company FSTechnology S.p.A.. During the extraordinary meeting on 29 May 2019, RFI's shareholder ratified the board of directors' approval of the demerger plan on 20 May 2019, appointing the CEO to define and negotiate the service contract between RFI and FSTechnology S.p.A. to entrust the latter with ICT services and other related and consequent duties.

September

ISO 55001 certification

On 9 September 2019, RFI received asset management certification pursuant to ISO 55001, as detailed in the paragraph on asset management. RFI received the certification from Italcertifier, a certification body accredited by Accredia, and it is the first and only certification received in Italy for the management of property, plant and equipment.

Establishment of Infrarail Firenze S.r.l.

On 11 September 2019, RFI established Infrarail Firenze S.r.l. with approved, subscribed and paid-up quota capital of €200 thousand. The new company will handle all that is necessary for the resumption of work on the Florence railway bypass. In addition, on 29 November 2019, RFI subscribed and paid up the €3 million quota capital increase.

Inclusion of RFI in the scope of general government

On 30 September 2019, ISTAT's list of the institutional units included in the consolidated income statement of general government was published in Official Journal no. 229, including RFI for the first time.

December

Update of the organisational model no. 231/2001

On 18 December 2019, RFI's board of directors approved the update of the Anti-Bribery & Corruption Management System (the "ABC system") and the organisational and management model pursuant to Legislative decree no. 231/2001 (the "231 model").

HUMAN RESOURCES

RFI revised its organisational structure in 2019 in connection with the reorganisation of certain business processes. With these revisions, it completed the review of organisational models that it had begun in 2018.

Other types of projects were dictated by group-level changes to the governance models for the management of ICT processes and relationships with institutions, leading to the transfer of RFI's ICT business unit to FSTechnology S.p.A., a new company set up to manage ICT strategy and operate as the FS Italiane group's service provider, and the elimination of RFI's Institutional Affairs department as all corporate functions for the management of relationships with national, local, EU and international institutions are now centralised under FS Italiane.

In terms of changes in the workforce, RFI hired 193 recent university graduates and experts under open-ended employment contracts, 978 apprentices to learn infrastructure maintenance (maintenance specialists), 736 apprentices to learn railway operation (station managers and traffic specialists), 198 railway operation staff and 145 office workers.

For redundant employees, the company used leaving incentives (solely for workers who were already eligible to receive their pension) and the extraordinary benefits of the Fund for income assistance (benefits received for up to five years until pension eligibility), based on the local agreements reached with the trade unions.

Changes in RFI's workforce from 1 January to 31 December 2019 are described below:

- number of RFI employees at 31 December 2018: 26,461 (including 240 managers and 26,221 white collars and junior managers);
- number of RFI employees at 31 December 2019: 26,407 (including 251 managers and 26,156 white collars and junior managers).

The net balance reflects 2,587 new employees (2,458 recruited on the market and 129 from other group companies) and 2,641 outgoing employees (97 to other group companies), including the effects of the timing dictated by the ferrying process.

Training

Training activities expanded further in 2019, with volumes up by roughly 35% on the previous year for a total of 163,657 trainees and 377,810 man-days. This increase is mainly related to the growth in new hires, with an impact on induction and qualification courses, and the overall increase in demand in all training areas, particularly occupational safety, which since July has been extended (including specialist training, e.g., work equipment) to all new hires.

In terms of the training strategy, 2019 was characterised by RFI's decision to continue along the same lines as the previous year. This specifically entails:

- a commitment to new hires, both for operations and staff positions, to consolidate their sense of engagement and accountability, in line with the group's new leadership model;
- initiatives to support the safety culture, first and foremost by continuing safety culture training specifically dedicated to apprentices hired between 2016 and 2017 (approximately 500);

- providing specific modules on the non-technical skills (NTS), i.e., communication, teamwork and coping with stress when operating in a key position for railway traffic, considered core skills with respect to the human factor in railway safety.

Last but not least, another two project merit mention due to their specific nature with respect to RFI's business. One entailed training for Sale Blu personnel, the only frontline employees, and the other consisted of language courses mostly taught online (around 650 courses launched for a total of over 2,500 hours used).

ENVIRONMENTAL POLICY

In line with "RFI's Integrated Safety Policy" and its mission, RFI pursues a balanced approach between stakeholders' social, environmental and economic needs. It hinges on an unrelenting focus on preventing environmental damage and the opportunities offered by environmental-conscious operations, which also promotes the shift in mobility towards more environmentally friendly and sustainable modes of transport.

Within the framework of RFI's more extensive commitment to sustainability, geared towards maximising the environmental benefits of railway transport and using the railway to enhance the areas it goes through, it interprets protecting the environment to mean, first and foremost, minimising the negative impacts of industrial activity on the environment, as the key, tangible expression of its sense of corporate responsibility, which goes beyond regulatory obligations.

Specifically, all the company's production units involved in managing environmental issues have an environmental specialist who handles the preparatory and preliminary work, gathers and processes data and provides assistance for the performance of the environmental protection duties assigned to the head of the respective local unit and personnel with specific responsibilities in this field. Environmental specialists also provide technical and operational support in the management of all environmental aspects relating to their respective units, such as waste, water discharge, issues connected with the noise created by line maintenance, water withdrawals, atmospheric emissions in connection with thermal plants, the use of dangerous substances for processing, the use of herbicides along the railway line, etc.. In addition to ensuring the proper management of environmental variables in compliance with regulations, the internal management system and the environmental policy, this type of organisation enables the company, which applies it extensively throughout its operating contexts, to maintain constant discussion and collaboration with all its key stakeholders at all levels, starting with government bodies for the land and environment, encourage coordination in this respect with other group companies, raise environmental awareness among RFI's personnel as much as its suppliers', and promote dialogue with associations and bodies representing passengers and the community.

Furthermore, RFI performed the following activities in connection with investment projects during the year:

- preparation of a preliminary environmental analysis of the areas of the Verona Porta Nuova freight hub owned by RFI and Mercitalia Logistica, for the development of the areas and to calculate the reclamation costs that could arise;
- management of the protocol of understanding for the plan to use the excavated materials resulting from the works to modify the route of the railway line between the Sibari and Bivio S. Antonello stations;

- management of the soil use plan for the performance of the Third Giovi Pass project;
- identification of the sites that will receive the materials excavated in the construction of the HS/HC Naples - Bari line, Naples - Canello section, with specific regard to the management of the possible level of pollution of the SCRIM and FIAT Auto sites;
- management of the environmental impact assessment procedure for the laying of double tracks on the Cesano - Vigna Clara section;
- management of the changes to the soil and rock management plan as part of the project to upgrade Catania - Siracusa line, Bicocca - Augusta section for high speeds;
- management of soil disposal processes at the Torino Orbassano terminal;
- management of investment projects to eliminate level crossings by the relevant central unit;
- post-operation management of inert material landfills by Cavet and managed by RFI DIN in connection with work on the HS/HC Florence - Bologna section.

With specific regard to noise abatement, RFI sent the MATTM, the MIT and the competent regional and municipal offices concerned the documents (maps and technical charts for the projects) in RFI's noise abatement and containment plan, which implemented the observations of local bodies and private entities concerning the sites or receivers not covered by the noise abatement work and the outcome of the periodic activities that RFI performed in accordance with Legislative decree no. 194/2005 ("Transposition of Directive 2002/49/EC relating to the assessment and management of environmental noise").

Governance, 2030-2050 sustainability goals and action areas

In 2019, RFI took large steps in the integration of sustainability in its strategies, particularly with respect to governance, establishing strategies and raising the awareness of personnel at all levels on the sustainability goals. RFI contributed to the development of the group's new sustainability governance model issued in May 2019, endorsed the group's long-term sustainable goals (2030-2050) defined in the scope of a consultation process with key stakeholders. These goals define the main action areas in which the group is committed to further strengthening the strategies already defined in the corporate business plan and substantially refer to three areas: safety (zero fatal events), energy and emissions (carbon neutrality) and sustainable mobility (increase in the modal shift for passengers and freight transport).

These goals form the group's vision and steer the group companies' long-term strategies and actions for the sustainable development of the business, the country and the global context. This is why they needed to be modelled as "system-wide goals" which are not pursued individually, but collectively by all group companies in cooperation with the institutions and civil society organisations that interact with RFI every day.

By leveraging the specific nature of its activities, its exclusive know-how and its great ability to innovate, RFI can make a difference in the conservation and reduced consumption of natural resources, the safety and resilience of transport infrastructure and the rise of new mobility models, as it strives to create value for shareholders, stakeholders and the country at large.

In light of the board's approval, all of RFI's investment and management plans will be more specifically assessed and geared towards the long-term sustainability goals. These goals relate to infrastructure and traffic safety programmes throughout the country, including seismic and hydro-geological risk assessments, technological progress and performance improvements in freight transport and local public transport, as well as local projects for new lines, the development of existing lines and metro bypasses.

On this front, demonstrating its penchant for innovation, in 2019, RFI completed the process to have the Frasso Telesino - S. Lorenzo section of the Naples - Bari line certified in accordance with the Envision protocol, which is already largely used around the world to assess and calculate the tangible value of the economic, environmental and social sustainability of infrastructure. RFI is the first to receive the highest possible level - platinum - in Europe.

Furthermore, in 2019, RFI launched a number of projects to involve institutional stakeholders – particularly the regions and municipalities – in the stations project, one of the RFI initiatives that is most directly geared towards developing a new, more sustainable, integrated and inclusive mobility model, with as much a focus on “internal” aspects to improve the usability and accessibility of stations (with the easy station and smart station projects) as on “external” aspects in terms of seamless connections with the land and other modes of transport. The goal is to integrate and connect stations with the surrounding area, make them new hubs for the development of intermodality, designed to be energy efficient and safe, and centres that attract important services for the area.

In addition, significant progress was made in 2019 with respect to corporate initiatives to develop best practices for standard and experimental environmental and social sustainability.

The commitment areas include:

- environment, saving and improving the efficiency of water resources through the use of the extensive water management project and the pilot project to reuse the water from washing sidings; energy efficiency and the reduction of emissions, through many projects ranging from the procurement of energy from renewable resources and the self-production of photovoltaic energy to testing on the recovery of kinetic energy from the braking of chains and studies on the impact assessment of hydrogen traction on the infrastructure; the circular economy, with pilot projects on the regeneration of foundry sands, the production of ballast using blast furnace scraps, etc;
- social, for the community, the use of assets that are no longer used in operations, extending the free loan of station spaces for social use, promoting the use of idle lines and buildings for greenways, sustainable tourism and soft mobility; workers, from continuous training to occupational safety using innovative devices and tools and HR sustainability initiatives through rewarding plans and compensation and development policies;
- interdisciplinary, in the supply chain, by extending the sustainability assessment to all economic operators participating in tenders awarded on the basis of the most cost-effective bid to better prevent environmental, social and reputational risks; with respect to stakeholders insight and customer satisfaction, by supplementing RFI's market observatory analyses with additional analyses on the travel habits, needs and expectations of users and non-users, to define projects on the intermodality of stations, services provided to people, the effective requirements and characteristics of the context and by focusing on achieving high customer satisfaction scores with respect to both passengers (station quality and Sale Blu) and railway companies.

Sustainability reporting

All the actions and commitments that RFI has established with respect to the environment fall within the scope of the FS Italiane group's commitment to environmental and social sustainability, which it describes and demonstrates in the group sustainability report.

In 2019, RFI carried out sustainability reporting for the year in accordance with the standards defined by the Global Reporting Initiative (GRI), which are the inputs, at consolidated level, for both the group's 2019 sustainability report and the consolidated non-financial statement in the directors' report on the group's annual report pursuant to Legislative decree no. 254/2016. These activities were completed in January 2020. RFI reported approximately 200 quality and quantity indicators in the 2019 sustainability report and, compared to the previous year, the energy and environment indicators show:

- energy: substantial stability in electrical energy consumption for non-traction uses, which in the last four months entailed a different composition of sources of energy following the conversion of some of the energy supplied through Edison S.p.A. (55 GWh, equal to roughly 11% of total electrical energy for own uses) into energy from renewable sources; an increase of approximately 10% in the consumption of diesel due, on one hand, to the rise in consumption (+22%) for railway ferrying and, on the other, to the decrease in consumption for heating (-8%) as thermal power plants were retired and consumption was optimised in buildings with idle areas; growth of around 2% in the consumption of natural gas, to be considered in light of the inclusion of stations in RFI's scope that, until 1 September 2018 had been managed by Centostazioni, which was then merged into RFI: on a like-for-like basis before the merger, again in this case, the optimisation of consumption in buildings with idle areas and the replacement of some of the water heaters with electrical energy indicates a considerable decrease (-14%);
- water: an increase of roughly 3% due to physiological changes reflecting the type and volume of production activities;
- waste: a 21% increase in total quantities, related to the increase in railway infrastructure maintenance, within which the breakdown of hazardous waste (86%) and non-hazardous waste (14%) remained substantially the same, although the volume of non-hazardous waste increased in absolute terms (+14%) as the campaign to replace creosoted sleepers with pre-compressed reinforced concrete sleepers was ramped up significantly. The portion of waste sent for recycling also increased, reaching 99% (+3%) to match the 2017 level.

Asset Management

In September 2019, RFI received asset management certification pursuant to ISO 55001. Received from Italcertifier S.p.A., a certification body accredited by Accredia, this is the first and only certification received in Italy for the management of property, plant and equipment. Internationally, RFI is one of the largest railway infrastructure operators to have such certification, considering the vast extension of the railway network that it manages and the size of its workforce.

The main benefits of an integrated, optimised asset management system include steady returns on investments and growth, long-term planning and sustainability performance, improved risk and corporate governance management, the possibility of demonstrating choices as the best in terms of costs/benefits within a regulated financing system and a general improvement in customer satisfaction.

ISO 55001 establishes the requirements of an efficient, integrated asset management system that helps organisations optimise the availability and profitability of their assets for their entire life cycle, from purchase to disposal.

This certification fits into a wider strategy outlined in the group's 2019-2023 business plan, which takes an asset-centric approach to further guarantee efficient network management to create value within the company and for stakeholders. Being certified is a way to recognise RFI's proper management of the assets entrusted to it for operation.

This certification is the result of a process that began in 2016 with the establishment of an asset management organisational unit, the spreading of the principles and best practices for the management of assets throughout the company, with the mapping of company processes, etc. This process entailed a preliminary assessment, an assessment of the documentary system and an audit conducted throughout Italy with respect to the application of principles, verifying that activities align perfectly with the objectives and strategies in RFI's business plan.

MACROECONOMIC CONTEXT

During the year, the global macroeconomic scenario showed signs of weakness for both developed countries, with more export-oriented economies, and emerging countries. Economic growth, i.e., GDP, only rose by 3.0%, the lowest rate recorded in the past ten years. Growth estimates for 2020 are 3.4%. At the same time, inflation in the main developed economies was weak because of the fall in energy prices, among other things. In particular, the price of oil is down on the previous year, steadily at under USD65 per barrel (Brent), the effect of weak international demand and larger US supply, which offset lower production in other countries.

International trade figures		2018	2019
<i>(% change on previous year)</i>			
GDP			
	World	3.7	3.0
	Advanced countries	2.2	1.7
	USA	2.9	2.3
	Japan	0.8	0.9
	Eurozone	1.9	1.2
	Emerging countries	4.6	3.8
	China	6.6	6.2
	India	7.3	5.6
	Latin America	0.9	0.7
Oil (USD per barrel)		71.6	63.7
International trade		3.4	0.3
<i>Source: Prometeia, December 2019</i>			

The economic growth rate slowed in the Eurozone as well, with average GDP growth of 1.2% on the previous year. The complex situation abroad, with trade wars, growing geopolitical tensions and the outcome of Brexit, was offset by the favourable domestic contribution of household consumption, sustained by a solid labour market, which recorded the lowest unemployment rate of the past ten years: 7.5%. GDP grew in all major Eurozone countries, albeit with differences: the highest growth was seen in Spain (+2.0%) and France (+1.3%), thanks to domestic demand and investments, despite the negative impact of foreign demand; and was lower in Italy (+0.2%) and Germany (+0.5%), where the contraction in manufacturing and exports was more significant. Eurozone inflation was relatively low throughout the year, stabilising at 1.2%.

	2018	2019	2018	2019
GDP			Inflation	
	<i>(% change on previous year)</i>		<i>(% change on previous year)</i>	
Eurozone	1.9	1.2	1.8	1.2

Germany	1.5	0.5	1.9	1.4
France	1.7	1.3	2.1	1.3
Italy	0.7	0.2	1.1	0.6
Spain	2.4	2.0	1.7	0.7

Source: Prometeia, December 2019

In 2019, the Italian economy was substantially stagnant, a trend seen in the second half of 2018, confirming its growth gap with the main European countries. GDP grew by 0.2%, thanks to household spending (+0.4%) and, mostly, capital expenditure (+2.2%), which benefited from tax incentives (super-depreciation). The contribution of net foreign demand was barely positive (+0.2%) due to the increase in exports being higher than that in imports.

2019

GDP and main components	Q1	Q2	Q3	Q4
	<i>percentage change on previous quarter</i>			
GDP	0.1	0.1	0.1	0.0
Domestic demand	0.5	0.1	0.5	0.1
Spending by households and private not-for-profits (1)	0.0	0.1	0.4	0.1
Public administration spending (2)	0.4	0.1	0.1	0.1
Gross fixed investments	2.4	0.2	0.2	0.1
- construction	3.0	1.3	0.2	0.3
- other durable goods	1.9	1.4	0.5	0.4
Imports of goods and services	2.4	1.1	1.3	0.6
Exports of goods and services	0.4	0.9	0.1	0.2
(1) Non-profit institutions serving households				
(2) Public administrations				

Source: Prometeia, December 2019

The unemployment rate went down to 10.0%, improving from the 10.6% of the previous year.

Italy's macroeconomic scenario presents certain risks that could arise from potentially adverse developments in the trade war and recent geopolitical unrest, which could further impact the already uncertain international trade situation. The consumer price trend in Italy has slowed since the end of 2018, with a slight bump of 0.6% in 2019, mostly due to the sharp cuts in the cost of energy consumption.

FINANCIAL POSITION AND PERFORMANCE

For the purposes of describing its financial position and performance, the company has prepared reclassified financial statements in addition to those required by the IFRS adopted by FS Italiane group (as detailed in the notes). The reclassified financial statements comprise alternative performance indicators which differ from those directly derived from the financial statements and which management deems useful in monitoring the company's performance and in presenting the financial results of the business. Reference should be made to the section "Key and glossary" for a description of the methods used to calculate these indicators.

Reclassified income statement

	<i>millions of Euros</i>			
	2019	2018	Change	Changes %
REVENUE	2,799	2,790	9	0%
Revenue from sales and services	2,650	2,633	17	1%
Other income	149	157	(8)	(5%)
Operating costs	(2,318)	(2,341)	23	(1%)
Personnel expense	(1,520)	(1,497)	(23)	2%
Other costs, net	(798)	(844)	46	(5%)
GROSS OPERATING PROFIT	481	449	32	7%
Amortisation and depreciation	(119)	(106)	(13)	12%
Net impairment losses	(24)	(5)	(19)	380%
Provisions	12	(26)	38	(146%)
OPERATING PROFIT	350	312	38	12%
Net financial expense	(34)	(38)	4	(11%)
PRE-TAX PROFIT	316	274	42	15%
Income taxes	(14)	–	(14)	
PROFIT FROM CONTINUING OPERATIONS	302	274	28	10%
Profit (loss) from assets held for sale, net of taxes	–	–	–	–
PROFIT FOR THE YEAR	302	274	28	10%

The main changes in these captions between 2019 and 2018 are shown below. The reasons for such changes are detailed in the specific notes to the financial statements, to which reference should be made.

Revenue from sales and services increased by €17 million, mainly due to the following factors:

- increase in fee revenue (€7 million), mainly due to the change in traffic volumes measured as train-km and the impact of changes in the tariff system approved with ART decision no. 43/2019;
- increase in revenue from concession services (€2 million) relating to the invoicing to the Umbria region following merger of UM Ferro S.r.l.;

- lower revenue from traffic-related services (€19 million) due to the drop in revenue from the sale of electrical energy for traction (€20 million) and from shunting services (€1 million), partly offset by the rise in revenue from auxiliary services (€2 million);
- lower revenue from processing for third parties (€3 million), substantially due to the slowdown in work on the Palermo Metroferrovia, also reflected in the related costs;
- lower fees and other property services (€1 million);
- greater sundry revenue (€29 million), mainly due the net effect of 2018 accruals and 2019 releases (€22 million) and greater revenue from grants (€7 million);
- greater revenue from property management (€2 million) due to the combined effect of higher revenue from the recharging of building expense (€4 million), offset by lower revenue from leases (€2 million).

Other income decreased by €8 million, mainly due to the following:

- lower income from performance regime penalty income (€6 million);
- lower revenue from other penalties (€6 million);
- lower insurance compensation (€6 million);
- lower revenue from sundry services (€3 million);
- the increase in other sundry income (€5 million) due to the forfeiture of the surety issued by Astaldi S.p.A.;
- the increase in gains (€8 million) mainly from the sale of property (€1 million) and in ordinary gains (€7 million).

Personnel expense increased by €23 million on 2018, mainly due to the rise in personnel expense for employees (+€20 million) and an increase in other costs (+€3 million).

Other costs, net decreased by €46 million, mainly following the combined effect of the following factors:

- total decrease of €121 million in Raw materials, consumables, supplies and goods, mainly due to the following changes:
 - the €79 million decrease in the consumption of materials due to the net effect of the €89 million reduction in materials used for investments and the €10 million increase in grants used for operations;
 - the €8 million increase in lighting and driving force costs;
 - the €37 million increase in revenue from internal work, due to an increase in production output by Officina Nazionale Infrastrutture e Apparecchiature Elettriche (the Bari, Pontassieve and Bologna national workshops);
 - the €3 million increase in accruals to the allowance for inventory write-down following the analysis of obsolete and slow-moving items to be disposed of;
 - the €17 million drop in costs for electrical energy and fuel for train traction;
 - the €1 million increase in the price to purchase materials in stock;
- the increase in service costs (€49 million), mainly due to the combined effect of:
 - the €19 million increase in costs for maintenance and repair of movable and immovable property related to non-recurring maintenance of property (€7 million), ordinary line maintenance (€6 million) and building maintenance (€12 million), offset, in part, by the €6 million decrease in costs for maintenance of movable property;

- the €10 million increase in contracted cleaning and other services due to the €13 million rise in contracted services, partly offset by the €2 million decrease in upkeep costs and the €1 million reduction in cleaning costs;
 - the €9 million reduction in costs for processing for third parties essentially due to the slowdown of work at the Palermo Metroferrovia;
 - the €11 million decrease in property services and utilities mainly due to the €10 million reduction in building expense and the €1 million drop in utility costs;
 - the €2 million decrease in administrative and IT costs due to the combined effect of the €4 million reduction in administrative services, partly offset by the €2 million increase in costs for IT services;
 - the €6 million increase in ferry services following the growth in high-speed boats on the Messina - Reggio Calabria and Villa San Giovanni - Messina routes provided by Blu Jet S.r.l.;
 - the €35 million increase in costs for other sundry services mainly due to the €17 million rise in accruals and the €8 million decrease in releases for a total of €25 million, the €12 million increase in infrastructure clearance costs, partly offset by the €1 million reduction in other third party services and the €1 million drop in testing costs.
- the €21 decrease in use of third-party assets due to lower leases (€15 million) mainly because of the effects of application of IFRS 16 - Leases (€13 million) and the lower trademark licensing fees (€9 million), partly offset by the €3 million increase in leases and indemnities for rolling stock;
 - the €13 million decrease in other operating costs substantially due to the €16 million drop in costs related to the Free Travel Card, partly offset by the €2 million increase in contractual penalties and the €2 million increase in accruals and releases due to the combined effect of the rise in prior year accruals then released in 2019 and in accruals for the performance regime;
 - the €61 million decrease in internal work capitalised because of the reduced use of materials.

Amortisation and depreciation of the year increased by €13 million mainly because of the depreciation of right-of-use assets recognised as a result of the application of IFRS 16.

Net impairment losses increased by €19 million, mainly due the €13 million increase in impairment losses on property, plant and equipment and the €6 million increase in impairment losses on loans and receivables.

Net financial expense decreased by €4 million following the €8 million increase in financial income, mainly as a result of the gain on the sale of the investment in CS Retail S.p.A., partly offset by the growth in financial expense (€4 million).

The €14 million increase is due to the higher regional tax on productive activities (IRAP) paid to settle the notices of tax assessment on the Free Travel Card for 2010-2014.

Reclassified statement of financial position

	millions of Euros		
	31.12.2019	31.12.2018	Changes
ASSETS			
Net working capital	(1,455)	(1,674)	219
Other assets, net	2,571	2,065	506
Working capital	1,116	391	725
Non-current assets	35,944	35,271	673
Equity investments	142	136	6
Net non-current assets	36,086	35,407	679
Post-employment benefits	(514)	(595)	81
Other provisions	(474)	(525)	51
Post-employment benefits and other provisions	(988)	(1,120)	132
Net assets held for sale	–	3	(3)
NET INVESTED CAPITAL	36,214	34,681	1,533
Net current financial (position) debt	524	(708)	1,232
Net non-current financial debt	1,961	1,859	102
Net financial debt	2,485	1,151	1,334
Equity	33,729	33,530	199
COVERAGE	36,214	34,681	1,533

The main changes in these captions in 2019 are shown below. The reasons for such changes are detailed in the specific notes to the financial statements, to which reference should be made.

The €1,533 million increase in net invested capital is the result of the €725 million increase in working capital, the €679 million increase in net non-current assets, the €81 million decrease in post-employment benefits and the €51 million decrease in other provisions, as well as the €3 million decrease in net assets held for sale.

Working capital improved by €725 million due to the €219 million increase in net working capital and the €506 million increase in other assets, net.

Specifically, net working capital rose because of the €123 million increase in inventories, the €85 million increase in payments on account to suppliers, the €19 million increase in current and non-current trade payables and the €5 million increase in construction contracts, partly offset by the €13 million decrease in current and non-current trade receivables.

Other assets, net increased by €506 million, mainly due to the €23 million decrease in those from the MEF, the MIT, the EU and others, net of the €761 million decrease in the related payments on account, the €2 million decrease in social security charges payable, the €2 million decrease in other tax liabilities, the €3 million reduction in deferred income and the €2 million increase in prepayments, partly offset by the negative effect of the €60

million increase in other current and non-current liabilities, the €175 million decrease in other current and non-current assets and the €6 million decrease in tax assets.

The €679 million increase in net non-current assets is due to the €599 million rise in property, plant and equipment, the €64 million increase in intangible assets, the €11 million increase in investment property and the €6 million growth in equity investments. Specifically, property, plant and equipment rose mainly because the amount of grants allocated for work was lower than the amount of progress of the year, as the financing for these grants was not covered by the resources available in the allocations under the 2020 Budget Act.

Furthermore, this caption was affected by the recognition of right-of-use assets following the application of IFRS 16 (€53 million), partly offset by the amortisation and depreciation of the year (€13 million was depreciation of right-of-use assets under IFRS 16).

At 31 December 2019, post-employment benefits decreased by €81 million and other provisions by €51 million due to the combined effect of accruals (+€73 million) and sundry utilisations and releases (-€124 million).

Coverage increased by €1,533 million as the net effect of the worsening of current net financial debt by €1,232 million and non-current net financial debt by €102 million, along with the €199 million increase in equity.

In detail, net financial debt worsened (by €1,334 million) mainly due to the following:

- net current financial debt worsened by €1,232 million due to the €790 million increase in current financial liabilities, the €262 million increase in the current portion of non-current loans and borrowings, the €180 million decrease in the treasury accounts, the €3 million increase in current loans and borrowings and the recognition of current lease liabilities of €13 million, partly offset by the €9 million increase in the interest-bearing intragroup current account and the €8 million increase in other current loans;
- net non-current financial debt worsened by €102 million, mainly due to the combined effect of the €590 million decrease in assets from the MEF and the recognition of non-current lease liabilities of €39 million, partly offset by the €300 million decrease in loans from the parent, the €195 million decrease in non-current bank loans and borrowings and the €30 million reduction in loans and borrowings from other financial backers, as well as the €2 million increase in assets for restricted current accounts.

Equity recognised in the reclassified statement of financial position includes hedging derivatives. Therefore, the following reconciliation schedule is provided for greater disclosure:

	millions of Euros		
	31.12.2019	31.12.2018	Change
Reclassified equity	33,729	33,530	199
Hedging derivative included in equity	(14)	(18)	4
TOTAL EQUITY	33,715	33,512	203

INVESTMENTS

NETWORK DEVELOPMENT

The main activities carried out during the year to strengthen the railway network are described below.

Progress of investments

In 2019, infrastructural investments totalled €4,438 million, down by €111 million (roughly 2.4%) on the previous year.

The financial progress used as a reference only considers production for the RFI investment plans.

Investments of approximately €1,205 million were allocated to large-scale infrastructural projects and roughly €3,233 million to maintain the efficiency of infrastructure and for work throughout Italy (including €247 million for technology-related projects).

Main investments in railway operations

In Acri, phases 3 and 6 (the definitive variation) of the project in progress on the "Metaponto-Sibari-Bivio Sant'Antonello" section began in February and June. These phases respectively consist of moving the track to a new bed, with the concurrent retirement of the existing track (phase 3) and moving the track from its temporary position (for the partial construction of the road underpass) to its definitive position (phase 6). Overall, the work on the Acri plant consists of six phases entailing the elimination of a level crossing by building an alternative road near the Acri station and eliminating that same Acri station to convert the section into an uninterrupted line and concurrently move the tracks on the four existing curves for a total length of roughly 3.750 km. On the same Jonica line, the second track was activated in October for the upgrade of the Rocca Imperiale PRG.

As part of the implementation of the PRG for the Bari Centrale station, ACEI phase 1 began in March, involving the transfer of both the northward/eastward and the southward/westward tracks.

In July, the definitive configuration of the new Follonica PRG was activated and the third station platform began operating. In September, phase 3 began for the doubling of the tracks between Pistoia and Montecatini, entailing infrastructural work on the line (bridges and underpasses) and on the junction north of Pistoia to prepare the station for the new double track intersection with Montecatini.

In Lazio, in February, a section of the future southward/westward track between Lunghezza and Bagni di Tivoli was temporarily activated as part of the laying of double tracks on the Lunghezza - Guidonia line. In April, the central computerised multi-station device was activated in the Fara Sabina - Civita section as part of the Rome hub's technological upgrade.

The Padua station underpass was opened for the laying of quadruple lines between Padua and Mestre. For the technological upgrade of the Turin - Padua line, the multi-station command and control system (MCCS) was extended to the Torino Lingotto - Trofarello - Carmagnola section.

The double tracks into the Genova Voltri Mare terminal were activated on 23 December 2019, two weeks ahead of the scheduled date in January 2020. This is the third phase in a total of four phases for the reinforcement of connections between the railway hub and the port terminal.

Key projects

As part of the technological projects planned for the railway network, in 2019, work began on the definitive designs of:

- the CCS control room in Naples, within the scope of the computerised interlocking system at the Napoli Centrale station;
- work on the yards for the Parma-Piacenza multi-station computerised interlocking system;
- the centralisation of the signalling and safety panels in Verona.

The definitive design for work on the laying of double tracks on the Chieti - Valpescara interport on the Rome - Pescara line began in January and the technical/financial feasibility study was conducted and completed on the new PRG and computerised interlocking system in Chieti. In July, the definitive design of the Pescara - Chieti section was completed for the start of the approval process (service conference).

In January - September 2019, the technical/financial feasibility study for the laying of double tracks on Ponte San Pietro - Bergamo - Montello sections and the Mantua - Piacenza section was completed and the definitive design began. In addition, the technical/financial feasibility study for phase 1 of the electrification of the Barletta - Canosa section was conducted and completed.

With respect to phase 1 to strengthen the Foligno - Terontola line, work began on the definitive designs to upgrade the Assisi and Ellera stations for high speed routes into the stations, update the platforms and build new underpasses.

On the Jonica line, the definitive designs began for the electrification of the Catanzaro - Crotona - Sibari section and the Lamezia - Catanzaro Lido section and the technical/financial feasibility study began for the Lamezia - Settingiano section. In addition, the definitive design of the five priority underpasses on the Jonica line was completed.

For the new Palermo - Catania connection, the definitive design of lot 3 "Lercara - Caltanissetta Xirbi" and lot 4 "Caltanissetta Xirbi - Enna - Dittaino" was prepared and completed, the definitive design of the Catenanuova - Dittaino section was completed and the technical/financial feasibility study for lot 3bis "Lercara - Caltanissetta Xirbi" and lot 5bis "Catenanuova - Dittaino" began. Furthermore, the definitive design for the restoration of the Caltagirone - Gela line began.

The technical/financial feasibility studies for the following projects were prepared and, in certain cases completed:

- the railway connection with the Brindisi port and the connection with the Brindisi airport, with the start of the definitive design as well;
- lot 1 of the upgrade to the Genoa - Campasso line, on the Bivio Fegino - Campasso section;
- the Salerno metro;

-
- and the new railway connection between the Bergamo station and the Orio al Serio airport, with the consequent start of the definitive design.

With respect to the project to complete the Udine hub, in January and February 2019 the definitive design began for the construction of the new Cargnacco operating control line (computerised interlocking system, the elimination of the level crossing, the superstructure and electric traction), work on phase 2 of the Udine hub and work for the PRG of phase 1 with the reconfiguration of the computerised interlocking system device.

In October, the definitive design of the noise dampening barriers in Florence (area 5) began and the definitive design for the completion of the direct P.ta Susa - P.ta Nuova line and the new Quaglia and Le Gru stops in the Turin metropolitan railway system was completed.

The definitive projects began for phase 2 of the technological upgrade of the Rome - Naples line (via Formia), work on the yard for the multi-station computerised interlocking system on the Formia - Villa Literno section, work on the superstructure and electric traction, and the PRG was also started for the multi-station computerised interlocking system on the Formia - Villa Literno section and the work on the panel, also for the multi-station computerised interlocking system on the Formia - Villa Literno section.

The definitive design began for the Val di Riga diversion and the Varna and Naz-Sciaves stops, the Brixen PRG began and the definitive design for the phase 1 works on the Torino Orbassano terminal was completed.

INTEGRATED TECHNOLOGIES

RFI has made technological innovation a priority, and it is through technological innovation that the company has not only developed infrastructure but stayed a step ahead of the times and made the Italian railway one of Europe's safest. According to the plans set forth with the government to improve infrastructure performance in terms of safety, speed, capacity, punctuality, the quality of services provided to railway companies and passengers, railway technologies encompass all electromechanical, electronic and automated plants and systems controlled by ground and on-board operators and help ensure traffic safety throughout the network, while also supporting and increasing the efficiency of all other processes for railway operation, line maintenance, public information, network electrification and remote monitoring of proprietary assets.

Within the scope of the farther-reaching strategy of transformation and technological innovation that the company is pursuing, it has developed a programme to speed up the implementation of the ERTMS, proposed by the MIT in 2018 and presented to key stakeholders during a specific workshop at the end of that year. In 2019, preliminary work began to examine the technical alternatives, migration scenarios and financial and socio-economic impacts summarised in a cost effectiveness analysis and, subsequently, in a cost/benefit analysis shared with the MIT. Furthermore, the plan was presented to the railway companies in July 2019, and their observations and comments were included in the analyses and discussed with the MIT in December 2019. For implementation to begin, the plan must now receive the MIT's formal approval and the government must send the new national implementation plan (NIP) to the European Commission pursuant to Regulation no. 919/2016.

Together with several railway companies (Trenitalia, Administrador de Infraestructuras Ferroviarias - ADIF and Société Nationale des Chemins de Fer Français - SNCF), RFI is developing the ERSAT system (ERTMS over Satellite), based on ERTMS with satellite localisation and the TLC network using a public operator on the ground linked to a satellite on the Cagliari - San Gavino section in Sardinia, in order to consolidate the use of two European standards: the GALILEO satellite and ERTMS. The know-how gained at the trial site in Sardinia will be used to have the Novara - Rho pilot line, which is expected to be co-financed by the European Space Agency (ESA), certified.

The second stage of the project to integrate new on-board sub-systems on the ERTMS lines was completed with the integration of the new Alstom on-board sub-system which will be used on regional trains operating on the HS/HC express Rome - Florence line where RFI is rolling out the ERTMS. At the same time, the company is currently conducting testing (at the experimental lab in Portonaccio) and the safety hazard analysis, which are regulated by the contracts for the integration of the BOMBARDIER B3 MR1 on-board sub-system and the SIEMENS B3 MR1 ERTMS on-board sub-system on the HS/HC lines already in commercial operation.

In 2019, the Pino Tronzano – Luino border line was fully equipped with ERTMS/ETCS L1 LS + P44 Eurozub/EuroSignum (the German train speed control system), extending it to the network switch station in Luino.

EU FUNDING OF INVESTMENTS

European Regional Development Fund (ERDF) resources – 2007-2013 NETWORK AND MOBILITY PON

The planning is complete and the definitive assignment of the grants is subject to the European Commission's definitive approval of the final execution report, pending the conclusion of checks on reported expenditure by the other beneficiaries of this programme.

ERDF resources – 2014-2020 INFRASTRUCTURE AND NETWORK PON

The 2014-2020 infrastructure and network national operating programme" was approved with the EU decision on 29 July 2015.

RFI requested financing for works to complete the previous 2007-2013 programme (€598 million) and for new projects entirely covered by the current programme (€607 million) for total costs for which reimbursement can be claimed of roughly €1,205 million, corresponding to a grant of €1,105 million, net of the funding gap.

In response to these requests, the PON authority approved all financing requests in note of acknowledgement no. 19309 of 3 December 2019.

In 2017-2019, RFI submitted reimbursement requests for €560 million, leading to collections of €354 million, €138 million of which was collected in 2019. RFI will presumably collect the remainder in 2020.

ERDF resources - 2014-2020 REGIONAL OPERATING PROGRAMME (POR)

RFI requested financing of €621 million from the Campania, Sicily, Calabria and Basilicata regions on objective 7.

It requested reimbursement of €307 million in 2019.

Connecting Europe Facility (CEF) - 2014-2020 plan

€131 million has been financed to date, with the signing of two new grant agreement in 2019 for the "ERTMS deployment on the SCANMED Corridor (Verona – Bologna section)" and the "Veneto region coordinated initiative enhancing core intermodal nodes" for a grant of roughly €10 million.

In addition, on 16 October 2019 a tender was published for the assignment of additional CEF financing. RFI presented financing proposals for a total of €10 million. The admission and financing decision will be announced in 2020.

Grants totalling €12 million were collected in 2019.

INFRASTRUCTURE

STATIONS

The strategic objective – as established in the broader station plan, a key part of the 2019-2023 business plan - is to put stations on the front line of a mobility project that prioritises public, shared and active solutions to drive a modal shift and contribute to the achievement of medium/long-term sustainability goals.

In most Italian cities, given the importance and specific transport that characterises them today, stations could become the new epicentre of a new mobility model, truly functional for the development of the urban sustainable mobility plans defined in Ministerial decree of 4 August 2017 in order to plan transport integrated with the urban and local structure and development.

In line with the objectives of the business plan, the company began a discussion process with the MIT and the MATTM to give stations a central role in the urban sustainability plans and to define sources of financing to connect stations with the cities that house them. In addition, talks began with ANCI, the association of Italian municipalities, and some of the main municipalities to implement the new station concept through joint processes based on an integrated approach to the planning of services, the sharing of solutions and the application of investments and new management models.

To improve the planning and design of the intermodal services that are connected and complementary to travel, RFI is developing an information system for stations, which performs innovative analyses based on digitised demographic, socio-economic, transport, infrastructural and tourist information in one GIS (geographic information system).

RFI conducted specific international benchmark analyses to define standards for the drafting of action plans in order to comply with ART decisions nos. 106/2018 and 42/2019 and to develop the new architecture for WEB RFI, based on a new service approach centred around the final customer.

With respect to the preparation of station investment plan, in accordance with the 2019-2023 business plan and in continuity with prior year investments in the local public transport business, RFI identified a pair of closely integrated and well defined macro-projects for stations to systematise and expand initiatives already under way or that are planned. They are the Easy Station and the Smart Station projects. The former is already in progress and will improve the physical spaces inside stations and the information provided to the public, while the latter will entail equipping stations with digital technologies.

The aim of Easy Station projects is to improve infrastructure for the comfort and accessibility of stations and for customer services. Investments have been revised in accordance with the business plan and have been established for the following initiatives:

- raising the platforms to the standard height of 55 cm to rail level so all passengers may access trains at level and passengers in wheelchairs may move as independently as possible,
- implementing an information system with computerised messages for the public,
- improving station accessibility (lighting, lifts, ramps, tactile walkways and maps, fixed signs, shelters, etc.),
- appearance and redevelopment of public spaces and improvement in station functionality.

Over the term of the plan, these projects will cover the 250 stations identified as those with the most traffic, accounting for over 80% of all network passengers, and as those with infrastructural and service development potential.

In 2019, concept designs were developed for around 16 stations and surrounding areas. Feasibility studies were conducted for the Easy Station and Smart Station projects at the Treviso, Pescara and Frosinone stations, entailing the redesign of spaces in the station to improve connectivity and attractiveness for customers and the identification of spaces and new functions for travel and other purposes. A feasibility study was also conducted on the Benevento station. Approximately 50 work sites began operating in 2019 and accessibility work was completed at 20 stations.

The Smart Station projects are bringing advanced technologies to stations, like Wi-life, the remote management of civil plants in stations and the installation of turnstiles to increase security. In 2019, technical analyses began for the start of these projects and operating methods were defined for stations included in the project.

The Service Charter

Again in 2019, RFI published its Service Charter (as per the DPCM of 27 January 1994 and the DPCM of 30 December 1998) on its website, which officially reports the results achieved in 2018 and the targets for 2019 in relation to the quality of the services provided to the public in the areas identified by legislation (the quality factors), based on the company's characteristics.

All of the targets for 2019, covering the 19 indicators representing the company's various fronts of action and focus of the greatest relevance for the public, were substantially reached. These include those referred to perceived quality, linked to customer satisfaction surveys, and those referring to the quality offered, checked via internal/third-party monitoring (still being finalised in certain cases).

The main quality factors of 2019 are analysed below.

Traffic safety

Of the services provided by RFI, the safe management of train traffic and railway operations throughout the national network used by the railway companies that provide passenger and freight transport services is paramount. In 2019, as in the previous year, safety was of prime importance in assessing the quality of the national railway infrastructure operator's core services. Above all, it is achieved through the granular involvement of its human capital, using technological, organisational and legislative controls and measures designed to minimise the risk of accidents.

So that the infrastructure is always at peak efficiency and to ensure maximum train traffic safety, RFI is committed to the constant protection, maintenance and upgrade of the infrastructure and its technological equipment, as well as the development of new lines and plants and fine-tuning increasingly effective production and management procedures.

RFI also achieved the traffic safety target of maintaining the ratio of the total number of deaths and serious injuries to the total number of km travelled by trains on RFI's network below the NRV (National Reference Value) assigned to Italy for the railway risk category "the company as a whole".

Environment and social commitment

RFI's environmental and social commitment is a strategic part of its business mission, which covers all the company's productive activities. Not only does it aim to protect the environment, but also to create shared value with a view to corporate responsibility and a commitment to the country's sustainable development.

Having fully achieved the three objectives for 2018, which included replacing traditional lamps with LED lighting in at least 40 stations, extending supplier performance assessments based on Corporate Social Responsibility(CSR) criteria to all tenders and improving the surroundings by making areas at the station no longer used for railway operations available on free loan for not-for-profit activities, RFI confirms its policy of granting areas in stations for social use and sets two new objectives for 2019: cutting carbon emissions and using water resources efficiently. RFI's commitment to reducing its carbon footprint will entail revising its policy for the procurement of electrical energy for uses other than traction to purchase energy from renewable sources. On the other hand, its commitment to efficient water consumption will entail preparing a long-term plan to optimise and rationalise all water management throughout the country on the basis of consistent criteria. Its action areas are: a) the transfer/retirement of wells and sources that are no longer used in railway operations; b) the separation of water accounts and remote monitoring of consumption to properly assess/allocate the company's use/costs and immediately detect leaks; c) upgrade water drains, wells and sources and RFI's fire-prevention assets; and d) make water consumption more efficient and/or reduce it by recycling the water in RFI's plants.

Modal integration of stations

Stations' integration with modes of transport other than trains is a particularly important quality factor for passengers. Similarly important is RFI's commitment to developing infrastructural and operational solutions that facilitate the interchange between different modes of transport used by passengers to reach the station and trains, either directly or in collaboration with local government bodies and mobility service companies.

To maximise the convenience of railway transport for freight operators, RFI is committed to creating and managing intermodal plan at strategic points on the network, along with an integrated offer of access to the network and terminal solutions. It is also committed to the development - in terms of organisation, performance and infrastructure - of railway connections to Italy's largest ports along the main trans-European transport network corridors.

Usability and comfort of stations

RFI manages over two thousand stations throughout Italy. They are essential network hubs where RFI's operations come into direct contact with passengers and where the infrastructure directly interfaces with the urban context and local residents. To recognise the company's commitment to raising the level of services that affect the station experience and the usability and comfort of stations in the network, the Service Charter focuses most on the level of quality perceived by passengers, which is monitored using customer satisfaction surveys conducted each year on all stations, covering close to 95% of train passengers. The monitored indicators include the perceived quality of stations overall and passengers' overall perception of the lighting, the cleanliness of areas in the station, the commercial services offered by third parties and safety and security in the station.

Security is a particularly important factor for the usability and comfort perceived by passengers at stations. Many measures to protect public spaces and all other railway assets have already been successfully implemented and continue to be extended to a growing number of stations: the installation of video-surveillance systems; burglar

alarms and other security systems; increasing security guards at peak travel times (holidays, sports events, etc.); awareness campaigns for passengers on the recommended behaviour and, especially, the recent platform access controls to prevent unauthorised people or those with illegal intentions from entering areas explicitly dedicated to railway services.

With respect to the perceived quality targets set in the Service Charter, which are linked to the percentage of satisfied passengers (satisfaction is considered a score of 6 to 9) for the services offered at stations, the results of the 2019 customer satisfaction survey show that nearly all macro-indicators across the entire network are substantially in line with 2018: they are all above 90%. RFI met its target for security, which was to keep the number of thefts suffered by passengers at the station (excluding those in shops and restaurants) below the benchmark values.

Public information

In close connection with operating the network, RFI has increasingly invested resources and personnel in public information, with respect to technology and tools, as well as organisation and communication strategies. Information on train traffic is provided to passengers first at stations using monitors and/or announcements tailored to the characteristics of the various stations. In addition, in 2019, the company made a new commitment to the public by publishing the same information as that provided at stations online at www.rfi.it as part of the new live arrivals/departures service.

Assistance to people with disabilities and reduced mobility

To facilitate mobility and access to station services by all passengers, RFI is committed to progressively eliminating architectural barriers in stations. Since 2011, when it acquired the role of Station Manager under Regulation (EC) no. 1371/2007 on "rail passengers' rights and obligations", it has provided assistance at stations to passengers with reduced mobility and has intensified its commitment to accessible information for all.

RFI began providing these services in an initial circuit of roughly 250 stations throughout Italy, which increased to 300 in 2019. The stations are selected on the basis of accessibility, the type of trains that stop there (whether the trains are equipped for wheelchairs) and whether there is demand from station users for this type of assistance services.

In 2019, RFI continued the work that it had commenced in the previous year to maintain high quality service levels. Customer satisfaction surveys show positive results on service quality at the Sale Blu. RFI has achieved three of the targets it set for assistance services:

- installation of another 120 new-generation wheelchair lifts at stations in the Sale Blu circuit to help people in wheelchairs board/deboard trains (for a total of roughly 450 wheelchair lifts);
- launch of an app for smartphones designed for the specific needs of disabled passengers and PRM;
- the installation of panels at stations with information on the accessibility facilities (lifts, walkways, ramps, etc.), which is already available online on RFI's website under the "Infoaccessibilità" service.

RFI provides free assistance 24 hours a day, 365 days a year to passengers of any railway company with physical, sensory or motor disabilities that temporarily or permanently affect their mobility.

To ensure the mobility of these passengers, RFI launched a specific plan to improve the accessibility of the areas open to the public, standardised and harmonised with other specific initiatives to improve station services as part of the Easy Station project involving the more than 600 busiest stations in the network, prioritising those in metropolitan areas with local public transport services.

In accordance with ART decision no. 106 of 25 October 2018, RFI undertook to pay an indemnity to PRM who use transport services subject to public service obligations if the lifts in the stations managed by RFI or its subsidiary GS Rail are out of order and are not restored within the times that the station manager has announced or re-scheduled.

Punctuality

Train punctuality represents the quality of RFI's product.

Real punctuality was used to measure punctuality performance in 2019, as it measures the performance perceived by customers directly.

Real punctuality (i.e., without excluding any trains) is the ratio of the number of trains that arrived within the punctuality threshold and the total number of trains in circulation (where NP is the number of trains that arrived, NC is the number of trains in circulation and real punctuality is equal to $NP/NC \times 100$).

The punctuality KPIs are defined as the ratio of trains that arrived within the punctuality threshold (based on pre-defined parameters) and the total number of trains in circulation.

RFI sets the punctuality targets at the beginning of each year, pursuing constant improvement.

The 2019 punctuality KPIs are as follows:

PUNCTUALITY KPIs	Real punctuality in 2019	2019 objective
Mainline trains - market service (within 5 minutes)	77.9%	74.0%
Mainline trains - universal service (within 15 minutes)	81.0%	82.0%
Regional trains (within 5 minutes)	88.8%	88.0%
Freight trains (within 30 minutes)	57.8%	56.2%

Real punctuality was affected by the following factors in 2019:

- increased traffic volumes due to the increased services requests from the railway companies, with shorter traffic management margins at hubs and on mixed traffic lines;
- extraordinary events with a significant impact on operations (in particular, the weather events of October and November 2019 in Northwestern Italy, the sabotaging of the Rovezzano operating control line, earthquakes affecting certain strategic lines on the network, such as the Florence hub and the HS Rome - Naples line);
- the performance of mainline trains - universal service was significantly affected by the weak performance in June and July 2019 (76.2% and 74.0%, respectively) due to the decline in the reliability of both

infrastructure and rolling stock because of the high temperatures in the period, which exceeded the summer average.

In July 2019, RFI transformed the punctuality task force that it had set up in November 2018 into the permanent Punctuality Committee for the analysis and strategic and operational resolution of the main critical aspects in operations and the achievement of increasingly higher punctuality standards.

RAILWAY OPERATING AND INFRASTRUCTURE SAFETY

Safety (rate of railway accidents)

Safety targets are monitored for the national railway infrastructure that RFI manages using the indicators identified in accordance with current legislation and the data stored in its specific database (the “dangers database”) and the current international criteria endorsed by the ERA (European Railway Agency).

The main indicators used to monitor safety performance are as follows:

- common safety targets;
- significant accidents (train collisions, train derailings, accidents at level crossings, fires on board rolling stock, injuries to people involving moving rolling stock, except for suicides and attempted suicides, other);
- rate of total accidents for which RFI is responsible;
- significant accidents for which RFI is responsible;
- “typical” UIC accidents;
- benchmarking of overall accidents (UIC);
- overall safety index for accidents (UIC).

For some of these indicators, the ERA has prepared and assigned common safety targets (“CST”⁴) at European level and national reference values (“NRV”⁵), based on historical data.

The table below compares the infrastructure operator’s cumulative performance in each risk category and for each indicator defined (measured in FWSI4 related to the “Basis of calculation”) with the CST and specific NRV for Italy.

⁴ Common safety targets;

⁵ National reference values (“NRV”): these are, for each of the CSTs considered at European level, the specific value assigned to the railway system in each member state.

Risk category	Measurement unit	Basis of calculation	OBJECTIVES		RECORDED DATA
			CST	NRV	2019 Actual data
			SHARED (x10 ⁻⁹)	ITALY (x10 ⁻⁹)	RFI (x10 ⁻⁹)
1. Passengers	1.1 No. of FWSI passengers per year due to serious accidents/no. of passenger-km per year	passenger-km per year	170.00	38.10	3.22
	1.2 No. of FWSI passengers per year due to serious accidents/no. of passenger-km per year	passenger-km per year	1.65	0.257	N.A.
2. Employees or contractors	No. of FWSI employees per year due to serious accidents/no. of train-km per year	train-km per year	77.90	18.90	0.54
3. Level crossing users	No. of FWSI railroad crossing users per year due to serious accidents/no. of train-km per year	train-km per year	710.00	42.90	16.43
4a. Other people on the pavement	Annual number of FWSI involving people classified as "Other" due to serious accidents /no. train-km per year				
4b. Other people not on the pavement		train-km per year	14.50	6.70	0.27
5. People unduly crossing the railway tracks	No. of FWSI involving people per year due to serious accidents/no. of train-km per year	train-km per year	2,050.00	199.00	133.34

The analysis in the table shows that the only target not reached in the year was that for "People entering or crossing the railway tracks in violation of rules" (violation of safety regulations by non-railway system people), although the indicator shows a significant improvement on the previous year.

In order to identify more effective methods to mitigate this critical issue, an in-depth investigation on the possible initiatives was carried out as part of a broader railway safety education strategy that will be pursued in conjunction with the railway police. Since last year, the railway police have been working with schools on various projects so that also children can learn the basics of safety, such as organising school excursions to the main stations by train, during which the importance of complying with safety rules is covered, or the creation of multimedia content such as cartoons or comics containing safety messages to be distributed by schools.

In 2019, there were roughly 79 **significant accidents**⁶, according to the ERA classification criteria (-25 on 2018). An analysis of causes of accidents highlights a decrease in the percentage of "internal" causes to 10% out of all accidents (8 out of 79), compared to 19% in 2018 (20 out of 104), demonstrating that the causes of most accidents are external to the railway system. They are broken down in absolute amounts by each type in the table below, which shows 2019 events compared to consolidated 2018 data.

CSI accidents (ERA classification)	Accidents (number)	
	2019	2018
Train collisions	4	6
Train derailings	4	6
At level crossings	6	3
Fires involving rolling stock	1	3
Other	2	6
Injuries to people involving moving rolling stock	62	80
total	79	104

In addition to being monitored according to the ERA classification, safety performance is also monitored internationally according to the UIC's criteria, which exclusively consider the effects of the railway service and therefore exclude people being run over, damage to people when they unduly board/deboard moving trains, suicides and attempted suicides.

"Typical" UIC accidents are classified as follows: collisions, derailings, fire on rolling stock, accident involving hazardous freight on at least one moving railway vehicle (train, shunting vehicle, work vehicle) in operations, causing a significant accident. The number of typical accidents during operations for which RFI is at fault in 2019 was the same as in 2018 (6).

To boost train traffic safety, RFI is committed to the constant protection, maintenance and upgrade of the infrastructure and its technological equipment, as well as the development of new lines and plants and fine-tuning increasingly effective production and management procedures.

⁶ The ERA's definition of a significant accident: any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded.

RFI conducts all business activities that have an even indirect impact on train traffic safety within the framework of the corporate safety management system. Authorised by the ANSF in the safety authorisation it issued to RFI on 14 June 2014 pursuant to Legislative decree no. 162/2007, the corporate safety management system is one of the three components of the integrated safety management system, which also comprises the environmental management system and the health and safety in the workplace management system, certified under the ISO 9001 standard, and ISO 14001 and OHSAS 18001 standards respectively.

Integrated safety management system

In 2019, RFI maintained the certification of its integrated safety management system (ISMS) according to ISO 9001:2015, ISO 14001:2015 and BS OHSAS 18001:2007, which it had renewed in 2018. A project was kicked off in 2019 to organise activities and initiatives to reinforce and foster a positive culture of safety. The “safety culture” project was created to verify the effective level of awareness of safety throughout the company in line with the recent changes in European legislation, which makes a culture of safety one of the requirements for the renewal of railway operators’ safety certification and authorisation.

Annual safety report – 2018

In June 2019, the company prepared its annual safety report for 2018, as required by ANSF guidelines no. 5841/2016 of 25 May 2016 concerning the national railway infrastructure operator’s obligations.

Annual integrated safety plan

The annual train traffic and operating safety plan (ANSF decree no. 10/2009) and the annual workplace safety and environmental protection plan are company tools to plan and monitor initiatives in place to maintain and improve safety. Together, they constitute RFI’s integrated safety plan.

The general principles used in the annual train traffic and operating safety plan to identify the planned mitigation actions are described in RFI’s integrated safety policy: “... reduce railway accidents to zero ...”.

Similarly, the general principles used in the annual occupational safety and environmental protection plan to identify the planned mitigation actions are also described in RFI’s integrated safety policy di RFI: “... reduce accidents in the workplace and adverse impacts on the environment to zero ...”.

Safety authorisation

In February 2019, RFI requested the five-year renewal of its safety authorisation from ANSF, which had originally issued the authorisation on 30 June 2014, pursuant to Directive 2004/49/EC⁷, transposed into Italian law with Legislative decree no. 162 of 2007⁸.

On 14 June 2019, ANSF issued safety authorisation to RFI, which was updated to reflect the acquisition of the former Umbria Mobilità network.

⁷Repealed by Directive (EU) 2016/798 of the European Parliament and of the European Council of 11 May 2016 on railway safety

⁸Repealed by Legislative decree no. 50 of 14 May 2019, “Implementation of Directive 2016/798 of the European Parliament and of the European Council of 11 May 2016 on railway safety”

By renewing the safety authorisation, ANSF confirms its formal approval of the infrastructure operator's safety management, which is one of the three components (together with the environmental and occupational safety systems) of the broader integrated safety management system. RFI owes this important achievement to its constant, pro-active commitment of all company departments involved in the safety management system during the first five-year term of the safety authorisation and while its renewal was pending.

Integrated safety policy

The integrated safety policy expresses RFI's formal commitment to managing railway traffic safety, occupational safety and environmental protection, key pillars of the company's mission. The policy, which defines safety guidelines and macro-objectives, is periodically assessed to ensure that it is always consistent with the type and extent of services provided by RFI.

The general guidelines established in the integrated safety policy are specifically described in the train traffic and operating safety policy, the occupational health and safety policy and the environmental protection policy.

These policies were formalised in May 2017 with organisational communication no. 449/AD of 11 May 2017.

INFRASTRUCTURE SAFETY

Tunnel safety

On 9 August 2019, RFI sent the MIT and ANSF the annual railway tunnel safety report for 2018, as required by article 14 of Ministerial decree of 28 October 2005, communicating the results of recalculation of the railway risk curves updated in line with new traffic data and infrastructural modifications carried out on 318 tunnels and 31 back-to-back tunnels in use and over 1,000 metres in length (article 11 of Ministerial decree of 25 October 2005).

Activities continued for the issue of emergency and rescue plans for tunnels that are more than 1,000 metres long. Support was provided to update the emergency and rescue plans for the tunnels on the HS/HC Bologna - Florence section for the authorisation of hazardous freight transport. The Bologna prefecture issued the update in December.

Nine bi-mode vehicles were delivered to the provincial fire brigades in Cosenza, Viterbo, Terni, Rome, Prato, Bolzano, Salerno, Chieti and Udine.

Work was completed on the compatibility analysis of the wall covering in tunnels on the Palermo C.le - Notabartolo - Carini section due to the passage of a historic diesel train.

Other work to improve safety and regularity

In 2019:

- testing was conducted for the authorisation to use magnetic mobile "RSS Spoormagnet" barriers as a precaution against illegal crossings of lines with a current coded automatic block system for trains travelling at up to 200 km/h;

- activities with the Milan Polytechnic University were completed to define a method to estimate the safe zone in the event of a derailment;
- work was carried out to complete upgrades, which had been planned for years, to increase the safety of the SSC system through the widespread roll-out of Vril10, which was implemented in accordance with the selective criteria of the signals already defined by the TSCS, to prevent significant effects on regular traffic.

In addition, the product technical specifications were prepared for the "SIPAC" ATWS (automatic track warning system) to protect extended work sites, which will interface with the signalling system on lines equipped with coded electric current automatic blocks. Specifically, this system will use the fixed CCS system on the ground (SIL4) to reduce the risk of human error.

Seismic vulnerability, hydro-geological risk and areas subject to landslides

Seismic vulnerability testing on infrastructural works along major railway lines pursuant to article 2.3 of Civil Protection Ordinance no. 3274 of 2003 and work to improve the management of seismic risks included the following updates:

- completion of inspections on 225 bridges in areas at high risk of seismic events, in addition to the 1,060 inspections conducted in previous years, and additional inspections were performed on 131 bridges in areas at lower risk of seismic events;
- performance of general inspections on 285 bridges in accordance with the procedure for inspections of bridges, tunnels and other railway infrastructure works;
- completion of the definitive designs for seismic improvement projects on 96 bridges found to be vulnerable to seismic events;
- completion of seismic improvement projects on 20 bridges, with work being carried out on 79 of the 228 bridges for which designs were drafted in 2016 and 2017.

For the construction of the new motorway bridge over the Polcevera River in Genoa, structural design of the frame and sub-structures was subject to a technical examination and the material and workshop processing for the metallic frame structures were inspected. With respect to the San Michele railway bridge in Paderno d'Adda, a technical examination was conducted on the design of the reinforcement of the damaged metallic parts that were insufficient to support the load and the materials and workshop processing of the metallic reinforcement parts were inspected. In addition, activities are in progress to support the upgrade of the monitoring system and for the maintenance and replacement of mainstays in the suspension bridge over the Po River for the HS Milan - Bologna line.

Furthermore, following the publication of the Directive on the "tsunami alert system", a study is in progress for the development of an app for the centralised control room to use to manage the risk of tsunami, similarly to seismic risk management.

In addition to the mapping already carried out for the mitigation of hydro-geological risks and the prioritisation of projects to protect the railway track bed, a plan was approved to carry out work for the mitigation of this risk.

After the hydro-geological structure plans were updated in 2018, a campaign of on-site inspections began to include charts on the hydro-geological instability indicated in the plans in the geology and hydraulics system.

The civil works were completed on two projects involving the alarm-equipped networks at the local production units in Ancona and Palermo and support was provided for the management/mitigation of hydro-geological risks and areas subject to landslides on four lines.

RESEARCH AND DEVELOPMENT

Research

During 2019, RFI S.p.A. consolidated the main activities commenced in the previous year by performing various research contracts in the fields of embedded systems, software engineering for railway applications, mechanical, diagnostics and electric traction solutions and IT and electronics, involving 25 departments of Italy's premier universities and national research centres.

During the year, eight executive contracts in relation to new activities were signed. In addition, the 21 contracts signed in 2018 were completed.

Through these research activities, the safety innovation and modernisation needs of the infrastructure may be identified and transferred to technological partners and suppliers. Technological upgrade processes may be implemented with positive results in terms of acquisition of expertise by human resources and possible future patents for technological devices and systems and the related generation of value, as well as the growth in internal know-how, as already mentioned.

In the second half of 2019, following the research stemming from an executive contract with Siena University, the design patent and industrial invention of a box drone was filed with the Italian patent and trademark Office. This invention is for a recovery, charging and data repository station, with control and command of a drone with commercial technological features used in missions to survey territories and infrastructures. Specifically, it would observe railway lines and all related active structures.

In 2019, the main investment projects in the field of development focused on, in particular, the creation of a centre for excellence, where RFI will concentrate all its know-how in all technological fields relating to railway signalling and telecommunications and the construction of a site where rolling stock can be tested before being put into service and where infrastructure systems and devices can be tested and measured.

Technological network plan

The 2019 update to the network technology plan was issued, revising the standards for the design and construction of currently available technological systems and products or that are being built on all lines and hubs to meet design requirements with respect to safety, capacity, regularity, faster speeds, obsolescence, technological integration and interoperability.

Technological development

In 2019, spending for investments in innovation approximated **€24.6** million. The following table analyses the amount of these investments by main operating segment:

millions of Euros

Operating segment	2019	2018	2017	2016	2015
Safety technologies	20.9	21.9	28.9	36	44.7
Innovative diagnostics		-	-	0.1	0.8
Studies and tests on new parts and systems	3.1	4.0	3.7	10.2	18.4
Environmental and land protection	0.6	0.5	0.3	-	-
Other		0.8	0.3	-	-
TOTAL	24.6	27.2	33.2	46.3	63.9

Spending for technological development varies over time due to the very nature of the developments, which may enter production or because additional pilots are carried out for a limited number of locations/categories/plants.

Activities related to works that began in 2019 related to the following main areas:

- development of the RAMSES information system to predict short-term and long-term weather events in specific areas of the infrastructure;
- design and construction of prototype platform ramps to help people with reduced mobility board trains, in order to create an RFI standard and establish a categorical and progressive solution that can be used for future supplies;
- development of a mobile diagnostics system to detect defects and the shape of railway tunnels through a multi-function diagnostics train to detect the soundness of the rails and the defects in the tunnels;
- systems to monitor the structural soundness of railway bridges and viaducts, implementing numerical models based on finite elements and calibrated, validated AI algorithms that describe their static and dynamic performance.

In addition, work continued on development projects launched in previous years, including:

- customisation of the National Alert System for the prediction of possible landslides due to intense weather events along the railway network (SANF-RFI) in partnership with the Research Institute for Geo-Hydrological Protection (IRPI) of the Italian National Research Council (CNR) in Perugia. This system will be customised for the entire network to improve awareness of any landslide events caused by intense weather events as announced in the Civil Protection Agency's weather alerts;
- activities to carry out tests and simulations of the static and dynamic performance of the brake shoes used and, in particular, the development of a numerical model and of a brake shoe prototype to develop an anti-derailment system that blocks the wheel only on stationary vehicles;
- monitoring of the track bed at the Petacciato site by applying optical fibre sensors on the tracks (application of the research project for the monitoring of the railway superstructure with optical fibre sensors in cooperation with the University of Pisa);
- creation of a "R&D technological demonstrators" centre for excellence where RFI will concentrate all its know-how in all technological fields relating to railway signalling and telecommunications will be concentrated;

-
- construction of the San Donato railway ring where rolling stock can be tested before being put into service and where infrastructure systems and devices can be tested and measured.

Technical and Monitoring Committee

In 2019, the Technical and Monitoring Committee continued its development and analysis activities to review the policies for the purchase of new products/asset systems, examining their functional, operating and maintenance impacts on the railway system. Specifically, the Committee: a) reviews the actual need to begin development of new systems and products for the railway infrastructure through an examination of the requirement sheets submitted by the Contractor Department; b) provides support and guidance in the roll-out of innovative products and systems, after the authorisation procedure has been completed and the investment project commenced, in line with current corporate procedures; c) carries out monitoring functions and facilitates the necessary analyses in the case of deviations, in order to identify any further production/application development needs.

During the meetings held in 2019, the committee analysed 14 requirement sheets, authorising 13 and cancelling one. It examined 10 research proposals and authorised all of them.

PERFORMANCE OF SUBSIDIARIES

Integration of the railways under concession

During 2019, RFI began a series of activities for the process of integration with some of the main railways formerly under concession throughout Italy. Specifically:

- **Ferrovia Centrale Umbra (FCU):** on 24 June 2019, an agreement was signed for the merger of UM Ferro S.r.l. into RFI, with effect on 1 July 2019, the last step in RFI's takeover of management of Ferrovia Centrale Umbra. Following the merger, RFI began work to define the Network Prospectus (PIR) for this infrastructure. On 9 August 2019, the first draft of the 2020 network prospectus (PIR) was published and the consultation began with all interested parties pursuant to article 14 of Legislative decree no. 112/15. Subsequently, on 20 December 2020, RFI published the definitive draft of the 2020 PIR along with the methodological document containing the proposed calculation of the fee for the services in the minimum access package (MAP) and the fees for the services not included in the MAP, offered by RFI for the 2018/2019, 2019/2020 and 2020/2021 service timetables, prepared in accordance with ART decision no. 121/2018. This documentation was sent to the ART for its consideration as per article 14.1 of Legislative decree no. 112/15.
- **Gruppo Torinese Trasporti (GTT):** for the Turin - Ceres line, in April 2019, the MIT, the Piedmont regional authorities, GTT S.p.A. and RFI signed a convention governing the conditions for the disbursement of government financing for the implementation of the operational investment plan. In November 2019, the agreement governing the conditions between the Piedmont regional authorities, GTT S.p.A. and RFI was signed to implement the aforementioned convention for works to make the line safe and talks also began for the assignment of management of the region-owned Turin - Ceres and Canavesana lines to RFI.
- **Ente Autonomo Volturno (EAV):** RFI and EAV S.r.l. signed a protocol of understanding in July 2019 to govern RFI's takeover of management of the Cancellone - Benevento line, for the purpose of its complete integration in the national railway infrastructure to enable the subsequent restoration/increase of passenger services operated by EAV and/or another railway company.
- **Azienda Tranvie e Autobus del Comune (ATAC):** for the Rome - Lido di Ostia line, in July 2019, the MIT, Lazio regional authorities, ATAC S.p.A. and RFI S.p.A. signed a convention governing the conditions for the disbursement of government financing and the deadlines, methods and obligations for the implementation of technological work to make the line safe. In November 2019, the agreement governing the conditions between the Lazio regional authorities, ATAC S.p.A. and RFI S.p.A. was signed to implement the aforementioned convention for work to build and roll-out the safety work on the line.
- **Puglia region:** in November 2019, the Puglia regional authorities, RFI, Ferrotramviaria S.p.A., Ferrovie Appulo Lucane S.r.l., Ferrovie Del Gargano S.r.l. and Ferrovie Sud Est S.r.l. signed a memorandum in which they expressed their willingness to begin a process to identify the conditions necessary to assign RFI the essential functions for the four regional infrastructures under concession, namely decisions on the assignment of railway tracks and the establishment of the consequent fees for the use of the infrastructure, in accordance with the criteria established by the regulator.

Blufferies S.r.l. (wholly owned)

RFI set up this company on 4 November 2010 in accordance with Anti-Trust legislation (Law no. 287/90) through the contribution of RFI's navigation business with effect from 1 June 2012. The company has a quota capital of

€20.1 million, which is entirely held by RFI. Its purpose is the transport of people, vehicles and goods by sea, the management and sale of its sea transport lines and the management of related services, the performance and provision of all port operations and services for ships at dock, the management, fitting out and lease and rental of its own and third party ships and the purchase and sale of ships and navigation and towing operations for its own and third party ships.

Blufferies shows a profit for 2019 of €2.2 million, down by 8% on the previous year, with revenue down by €3.5 million on the previous year. The decrease in revenue was due to both the drop in traffic revenue - as revenue from passenger transport was €1.9 million lower following the transfer of the business unit consisting of passenger transport between Messina-Villa San Giovanni and Messina-Reggio Calabria operated using five high-speed boats, to the subsidiary Blu Jet, with effect as from 1 May 2019, the €1.6 million increase in revenue from road transport (€1.1 million of which related to the heavy transport segment and €0.5 million to the car segment) and the €0.2 million reduction in other revenue from transport services - and to the drop in other revenue and services because of lower non-recurring income (such as the penalties charged to the builder for the delayed delivery of the Trinacria and the compensation from the quotaholder RFI for the disposal of the right to use the car decks of the railway ships included in the initial contribution of the business unit).

Operating costs are down on the previous year due to the combined effect of the €1.4 million decrease in costs for the high-speed boats following the demerger to Blu Jet S.r.l., the €0.5 million increase in costs for the bidirectional ships as a result of the increase in the fleet to four ships and the €0.3 million decrease in other operating costs.

Amortisation, depreciation and impairment losses decreased by approximately €2.3 million mainly due to the complete impairment of the right-to-use to the decks on RFI's railway ships.

Provisions increased by €0.2 million due to accrual to the routine maintenance provision for the Trinacria ship and €0.2 million worsening in net financial expense, mainly due to the impairment of investment in the associate Terminali Tremestieri S.r.l.

Terminali Italia S.r.l. (wholly owned)

This company was set up on 16 May 2008 to optimise the capacity to access public freight plants and to optimise their use based on the concepts of fairness, transparency and non-discrimination initially provided for by Legislative decree no. 188/2003, and later replaced by Legislative decree no. 122 of 15 July 2015. RFI holds 100% of its quota capital after acquiring the 11% that was held by Mercitalia Intermodal (formerly Cemat). The company's business object is to manage and operate centres equipped for intermodal transport, including those serving interports or similar national and international infrastructures and providing terminal services, as well as managing and operating railway terminals for national and international transport, and the construction, purchase, rental, use, repair and maintenance of means and equipment of any kind and technique, functional to intermodal transport, including on behalf of third parties.

Terminali Italia's profit for 2019 is €3.2 million, up by approximately €1 million on the previous year, with the operating profit up by roughly €1.3 million due to the increases in revenue from terminal services (around €1.7 million), revenue from shunting services (€242 thousand) and other revenue (€1 million), with a consequent €1.2 million increase in costs.

Total operating costs in 2019 show a slight decrease in personnel expense, due to the trend in outgoing employees for retirement, and the rise in other operating costs following the growth in the handling business traffic volumes at both directly-managed terminals (Verona and Segrate first and foremost, and Turin and Catania to a lesser extent) and at plants managed in partnership under network contracts (specifically in Bari and Brescia).

Total load units handled show a total increase in production output of 3.99% compared to the previous year.

Tunnel Ferroviario del Brennero - Società di partecipazioni S.p.A (88.99%)

The business object of this company is to “manage the investment in Galleria di Base del Brennero BBT SE and any other entity promoting the railway tunnel at the base of the Brennero”.

The main events of the year refer to equity transactions and the increase in the investment in BBT SE.

In particular, during the extraordinary meeting on 27 March 2019, the shareholders approved the tenth capital increase up to a maximum of €120 million, which was then carried out in one tranche on 16 May 2019. At 31 December 2019, the company’s share capital totals €825,790,910 and consists of 825,790,910 shares with a nominal amount of €1 each. Following the subscription of the tenth capital increase, RFI’s interest increased from an initial 88.20% to the current 88.99%, which at 31 December 2019 corresponds to €735 million. The company has contributed €160 million to its associate BBT SE to finance Phase III.

TFB reported a profit for the year of approximately €62 thousand, due exclusively to the financial income generated by bank accounts.

Blu Jet S.r.l. (wholly owned)

RFI set up Blu Jet S.r.l. on 1 August 2018 as part of the organisational restructuring of the ferrying services under concession, following the change to the legislative framework introduced by Law decree no. 50 of 24 April 2017, converted with amendments into Law no. 96 of 21 June 2017.

Since 1 May 2019, Blu Jet S.r.l. operates, as appointed by its quotaholder RFI, the passenger transport service for the Messina-Villa San Giovanni and Messina-Reggio Calabria connections using five high-speed boats, three of which it specifically leases on a bareboat basis. Following the partial demerger of Blufferries S.r.l. (the demerged company) to Blu Jet S.r.l. (the beneficiary), with effect from 1 May 2019, the latter took over management of the connection services without interruption. The company operated the ferrying service on the Messina - Villa San Giovanni route, offering ten pairs of daily connections on weekdays and eight pairs on Saturdays, Sundays and holidays, and the ferrying service on the Messina - Reggio Calabria route, with 16 pairs of daily connections on weekdays and six pairs on Saturdays, Sundays and holidays. The profit for 2019 amounts to approximately €96 thousand. Revenue from operations mainly relate to the service contract with RFI and, to a residual extent, the sale of tickets. Operating costs consist of personnel expense for crew on the high-speed boats, diesel fuel procurement and the costs of auxiliary services for the operation of the passenger transport service.

Grandi Stazioni Rail (wholly owned)

On 13 November 2018, RFI received 100% of Grandi Stazioni Rail through the contribution by the previous sole shareholder FS Italiane S.p.A.. The transaction was part of the comprehensive reorganisation of the station

business, aimed at the integrated development of the network stations as intermodal hubs serving mobility. The company's object is to redevelop, improve and manage the fourteen largest Italian railway stations.

The profit for 2019 amounts to €5.9 million, up by approximately €0.6 million on the previous year.

Revenue rose by around €19 million (13.5%) compared to 2018, mainly due to the €10.3 million rise in revenue from engineering services after RFI advanced greater amounts for works, greater revenue from parking following the increased revolving use of network car parks and the growth in revenue from leases as the leases for the antennas and mobile radio transmitters in the GS Rail network took effect.

In addition, income rose by roughly €2 million mainly due to the new electrical energy distributor business.

In 2019, operating costs grew in proportion to the rise in revenue and are up by roughly €15 million (11.6%) on 2018, mainly due to the €10.3 million rise in costs for engineering services contracted to third parties and greater costs incurred to manage the stations in the network.

Amortisation and depreciation rose by around €1.1 million due to new assets placed in service, mainly in connection with extraordinary maintenance work on the entire network and the application of IFRS 16 from 1 January 2019. Impairment losses increased by €1.8 million on 2018 mainly due to the loss allowance recognised in relation to a contractor for contractual penalties and ordinary credit assessment processes.

On 3 April 2019, the MIT and Grandi Stazioni Rail signed the convention governing the financial terms and disbursement of the government resources allocated in chapter 7556 of the MIT's budget for "Work on behalf of Grandi Stazioni for redevelopment and accessibility at major railway stations", pursuant to Law no. 232 of 11 December 2016 concerning the "Government budget for 2017 and the three-year budget for 2017-2019". The Court of Auditors registered the convention on 29 April 2019.

The funds allocated to Grandi Stazioni Rail for these projects total €42 million and must be used for new investments yet to be implemented, which were previously not covered by financing, in relation to:

- Roma Termini station for a total of up to €18 million;
- Milano Centrale station for a total of up to €15 million;
- Palermo Centrale station for a total of up to €5 million;
- technological and safety systems at the large stations in Southern Italy, i.e. Bari Centrale, Napoli Centrale and Palermo Centrale, for a total of up to €4 million.

Infrarail Firenze S.r.l. (wholly owned)

On 11 September 2019, in accordance with the resolution of RFI's board of directors on 26 June 2019, a new company was established, wholly owned by RFI and named Infrarail Firenze S.r.l., with quota capital of €200,000.00. On 13 November 2019, RFI subscribed and paid up Infrarail Firenze's capital increase of €3,000,000 to cover the cost of starting up and organising the company.

The company was set up to perform all services and activities necessary to ensure the safety and production of work sites on the HS Florence hub railway bypass, the infrastructural work to improve traffic flow at the same hub and the preliminary and functional work for these projects, carried out on behalf of its sole quotaholder, RFI. Infrarail Firenze will also handle the maintenance of equipment and plants at the work sites and structural, geo-technical and environmental monitoring, as well as environmental protection and mitigation at work sites and engineering services for the project to be carried out. The company was not yet operative in 2019 and reported a loss for the year of roughly €57 thousand, mainly due to the costs of services in connection with the company officers, the secondment of personnel and the independent auditors. The company began operating in early 2020 in accordance with its business object.

TREASURY SHARES

The company does not own any treasury shares or shares of its parent either directly or through trustees or nominees, pursuant to article 2357 of the Italian Civil Code.

LITIGATION AND DISPUTES

Introduction

This section details the most significant court and criminal proceedings pending at the reporting date and which entailed developments in the year. Unless otherwise indicated, up to the date of preparation of this report, no information had arisen that would indicate that the company is exposed to contingent liabilities or losses of any amount, nor is any information known with a potentially material impact on the company's financial position, financial performance or cash flows. Furthermore, where necessary, the companies have joined the criminal proceedings as a civil party.

In 2019, following criminal proceedings initiated by the public prosecutors against former or current company representatives, except for those described below, there were no definitive rulings against senior management (company officers or general managers) for any of the following:

- particularly serious crimes with wilful intent entailing substantial damage to the company or leading to the application of restrictive measures;
- fraudulent crimes covered by Legislative decree no. 231/2001;
- additional fraudulent crimes covered by Law no. 190/2012.

Litigation and significant proceedings pending with employees, third party service providers and/or contractors, the tax authorities, regions, etc., for which, where the relevant conditions are met, accruals have been made to specific provisions for risks and charges, are detailed in the notes to the financial statements, to which reference should be made, as for information on contingent assets and liabilities.

Reference should be made to the corresponding section of the 2018 Annual Report for information on proceedings and disputes that did not change during the year.

Investigations, criminal proceedings and proceedings pursuant to Law no. 231/2001

With respect to the most significant judicial investigations and court proceedings that certain Public Prosecutor's offices have initiated against former RFI representatives, as there are no indications that the company may be exposed to significant liabilities or losses and no information is presently known with a material impact on its financial position, financial performance or cash flows, no accruals have been recognised.

Litigation pursuant to Legislative decree no. 231/2001

There were no developments in 2019 in connection with:

- criminal proceeding no. 2554/2013 in the general register of crimes, in the hearing phase before the Foggia Court in relation to the company's administrative liability for the fatal workplace accident on 5 March 2010 at Agro di Cerignola, in which an employee of Fersalento S.r.l. died;
- criminal proceedings no. 1430/2014 in the general register of crimes with the Gela Court in relation to the company's administrative liability for the accident in which three RFI maintenance workers were fatally hit by regional train 12852 travelling from Gela to Caltanissetta on 17 July 2014, near km 217+728, between the Falconara and Butera stations.

With respect to criminal proceedings no. 6305/2009 in the general register of crimes with the Public Prosecutor's Office at the Lucca Court, following the railway accident in Viareggio on 29 June 2009, on 20 June 2019, the

Florence Court of Appeal read the second-level ruling, which partially reversed the first-level ruling of the Lucca Court. In particular, as relates to the FS Italiane group, the Court of Appeal confirmed the acquittal of FS Italiane S.p.A. and FS Logistica S.p.A. (now Mercitalia Logistics S.p.A.) from any liability pursuant to Legislative decree no. 231/2001, as well as the acquittal of the former CEO and chairman of FS Logistica S.p.A. and four officers of RFI S.p.A.. It also acquitted five other former managers of RFI S.p.A., who had been found guilty in the first-level ruling, and dismissed the charges against two managers who had died in the meanwhile (one RFI S.p.A. manager, who had been acquitted in the first-level ruling, and one Trenitalia S.p.A. manager, who had previously been found guilty). Moreover, the allegations of fire and negligence leading to injuries were dismissed under the statute of limitations. The Court of Appeal also confirmed Trenitalia S.p.A.'s and RFI S.p.A.'s liability pursuant to Legislative decree no. 231/2001 and the related penalties, revoking the previously imposed ban on advertising goods and services for three months. The Court of Appeal also found FS S.p.A.'s former CEO guilty of the offences with which he was charged due to his position (for which he had been acquitted in the first-level ruling) and confirmed the first-level ruling that found him guilty in his capacity as former CEO of RFI S.p.A. (2001-2006). The Court of Appeal also confirmed, although reducing the sentence, the liability of the former CEO of RFI S.p.A. (2006-2009), the former CEO of Trenitalia S.p.A., one RFI S.p.A. manager and two former officers of Trenitalia S.p.A. (one of whom was also found guilty considering the position he held at the time in FS Logistica S.p.A.). The Court of Appeal also confirmed the liability of the GATX group, including with respect to the liability pursuant to Legislative decree no. 231/2001 (but reduced the penalty and ban) and the liability of two officers of Cima Riparazioni (the company was definitively acquitted with respect to the liability pursuant to Legislative decree no. 231/2001). As regards the civil court proceedings, the order to compensate the aggrieved parties, jointly and severally with the other parties charged and found liable, was extended to the former CEO of FS Italiane S.p.A. and, consequently to the company. The Court of Appeal lodged the reasons for the ruling on 16 December 2019. The case will be made for the third-level ruling in the next few months.

In relation to criminal proceedings no. 3651/2018 in the general register of crimes with the Milan Public Prosecutor relating to a railway accident that occurred on 25 January 2018 in Seggiano di Pioltello, involving the railway company Trenord S.r.l.'s regional train no. 10452 - operating the commercial service on the section between Cremona and the Milano Porta Garibaldi station - which caused the death of three passengers and injuries to others. The preliminary investigations in the criminal proceedings commenced by the Milan Public Prosecutor following the accident have been completed, with the issue of the notice pursuant to article 415-*bis* of the Criminal Code and the term to present a defence is pending. According to the notice, the CEO and eight officers of RFI have been indicted. RFI is also charged with administrative liability pursuant to Legislative decree no. 231/01.

The notice of conclusion of the preliminary investigation also indicate the indictment of a director of ANSF and one of its officers, while all charges against people at Trenord S.r.l. have been dropped.

RFI is assisted by a trusted lawyer and technical experts. The company promptly activated insurance policies in place to cover any liabilities that could arise and many of the suffering parties have received compensation for agreed damage.

Criminal proceedings no. 16682/2014 in the general register of crimes with the Palermo Public Prosecutor's Office against the CEO of RFI S.p.A. and the company for administrative liability pursuant to Legislative decree no. 231/01 relate to the alleged illegal disposal of waste by the supplier at the Camastra (AG) landfill following the

works carried out by RFI S.p.A. on the platform under the Petrace bridge in Gioia Tauro (RC). The alleged violations by the CEO and the company were dismissed with the ruling of the Palermo preliminary investigation judge on 24 April 2019.

In criminal proceedings no. 524/2020 in the general register of crimes with the Public Prosecutor's Office at the Lodi Court, following the derailment of the HS train 9595 in Livraga on 6 February 2020, RFI S.p.A. is being investigated for an administrative violation pursuant to article 25-*septies* of Legislative decree no. 231/2001, together with the CEO and nine employees/managers charged with involuntary manslaughter, negligence leading to injuries and negligence causing a train crash. Based on what is currently known, Alstom's CEO and other subjects outside the FS Italiane group are also being investigated for the same crimes. The preliminary investigation is being conducted.

Other significant criminal proceedings

Since that described in the 2018 annual report, there have been developments in criminal proceedings no. 3034/2012 with the general register of crimes with the Rossano Public Prosecutor's Office and subsequently transferred to the Castrovillari Public Prosecutor's Office, relating to a fatal accident in which a train hit a car with six people inside it at the private level crossing at km 155+849 of the Rossano C. - Mirto Crosia section. RFI's managers and employees (some of whom have since retired) and other parties not related to the FS Italiane group are charged, jointly, with involuntary manslaughter and negligence causing a train crash. At the preliminary hearing, FS Italiane S.p.A. was summoned as the party liable for damages, but RFI S.p.A. appeared in its place.

The criminal proceedings against RFI personnel in which the company has appeared in court as liable under civil law and which are not covered by insurance, since the 2018 annual report:

- there have been no developments in criminal proceedings no. 2899/2009 in the general register of crimes with the Avellino Court against, *inter alia*, four former officers of FS Italiane, charged with the crimes indicated and punishable under articles 110, 589 and 590.2/3/4/5 of the Criminal Code;
- with respect to criminal proceedings no. 1744/2014 in the general register of crimes with the Palmi Court against an employee charged with the crime indicated and punishable under article 590 of the Criminal Code in relation to the accident on 2 September 2013 at the Rosarno station involving a passenger, the employee was acquitted on 16 December 2019 for not having committed the crime;
- there was another notice in relation to criminal proceedings no. 649/17 in the general register of crimes with the Trento Court against two RFI managers for the crime indicated and punishable under article 659 of the Criminal Code.

Other investigations

K2 discount pursuant to Ministerial decree no. 44T/2000 - Ruling of the Council of State

In addition to that indicated in previous annual reports, to which reference should be made for additional details, this matter refers to the civil action commenced by Trenitalia requesting the court assess - due to the infrastructure operator's non-application of the K2 Discount - of its payment of a fee to use the infrastructure between 1 December 2005 and 31 December 2007 in excess of the amount actually due, and consequently order RFI to return the amounts unduly received plus interest. The first hearing, initially set for 16 May 2018, was postponed to 13 March 2019 following the decree issued by the Civil Court of Rome, allowing RFI to implead the

MIT and the MEF to guarantee and indemnify the amounts related to the K2 Discount which may be owed to Trenitalia. Accordingly, RFI notified the judicial acts to the competent Ministries.

All parties appeared at the hearing on 13 March 2019, including the MIT and the MEF. At the hearing on 15 January 2020, the judge adjourned to reach a decision on the matters in question, namely the admissibility of the two Ministries (which RFI claimed) and the appointment of a court-appointed expert to accurately quantify the amounts to which Trenitalia and Mercitalia are entitled (which RFI opposed). With the ordinance of 20 February 2020, the judge postponed the decision on all preliminary requests and appointed the expert to quantify the discount, scheduling the hearing for 10 June 2020.

Proceedings A436 – Arenaways S.p.A./RFI – FS

With respect to that indicated in the previous reports, to which reference should be made for additional details, following the hearing for AGCM's appeal on 11 April 2019, the judge adjourned to reach a decision. Therefore, if the first-level ruling is upheld on appeal, RFI will request the repayment of the penalties it paid (€100 thousand) in compliance with the now-repealed measure.

Regulatory measures in ART decision no. 70/2014. RFI v. ART, appeal before the Lazio regional administrative court no. 5406/2015

Reference should be made to previous reports for a more detailed description of these appeals. RFI's first-level appeal against ART decision no. 70/2014 was denied and the company appealed at the next level. On 9 September 2019, with ruling no. 6108, the Council of State admitted RFI S.p.A.'s appeal against the Piedmont Regional Administrative Court's ruling and cancelled part of ART decision no. 70/2014. The judge on the appeal admitted all RFI's arguments and explicitly noted that the unit value of the fee to access the infrastructure recognised in the aforementioned decision (i.e., €8.2 per train x km) did not fully include remuneration on invested capital in its risk capital component.

Following this ruling, on 31 October 2019, Italo - Nuovo Trasporto Viaggiatori S.p.A. notified RFI of an appeal to have Council of State ruling no. 6108/2019 revoked due to an alleged "error in fact" by the judge, who did not believe that the remuneration of invested capital was entirely included in the fee for the period of time when ART decision no. 70/2014 was in effect.

The ART agreed with the above and joined the proceedings, notifying RFI on 26 November 2019 of an appeal to have the Council of State's ruling revoked with a "motion for the suspension" of its effects, partly for the same reasons as those expressed by Italo - Nuovo Trasporto Viaggiatori S.p.A..

Furthermore, on 28 November 2019, Trenitalia also notified RFI of its own appeal to have the ruling revoked, along with an economic report prepared by an advisory firm, which also highlighted the judge's alleged "error in fact".

On 23 December 2019, the ART notified RFI of another appeal before the Joint Sections of the Court of Cassation to have ruling no. 6108/2019 quashed on the alleged grounds that it went beyond the outer bounds of the Council of State's jurisdiction and arbitrarily violated the scope of activities reserved for the ART by exercising jurisdiction and decision-making powers not provided for by law.

A preliminary ordinance was recently issued in relation to Italo - Nuovo Trasporto Viaggiatori S.p.A.'s appeal before the Council of State, ordering the analysis of the amount of the fee to use the infrastructure by the Head of the Department of Environmental, Land and Infrastructural Engineering with the Milan Polytechnic University. RFI has not yet received any information on the expert's preliminary activities.

Anti-Trust Authority proceedings no. A/519 - Veneto region

Reference should be made to the previously reported information for further details. However, on 10 May 2018, the Anti-Trust Authority (AGCM) notified RFI - along with Ferrovie dello Stato S.p.A. and Trenitalia S.p.A. - of a measure to begin the preliminary proceeding to ascertain whether the three FS group companies, between 2015 and 2017, had adopted an overall strategy to unduly exploit RFI's legal monopoly on the railway infrastructure operation market, in order to preserve Trenitalia's position as incumbent on the market of the supply of regional and local railway transport services in Veneto.

Specifically, the AGCM argued that the FS Italiane group's strategy had allegedly committed to carrying out infrastructural projects on the Veneto railway network for the electrification of certain lines by RFI, on the condition that the Veneto region would, as it had in the past, directly assign regional and local railway services to Trenitalia for a total period of 15 years (2018-2032) in place of the previous nine-year assignment. This was to the detriment of the railway company Arriva Italia Rail S.r.l., which had expressed an interest in being assigned the service.

On 7 August 2019, the FS Italiane group companies were notified of the measure concluding proceedings A/519 in which the AGCM confirmed the assessment of violation of article 102 of the Treaty on the Functioning of the European Union (abuse of a dominant position) by RFI, Ferrovie dello Stato Italiane S.p.A. and Trenitalia S.p.A. with respect to the Veneto region's direct assignment of the public railway transport contract to Trenitalia, and found the three companies responsible for abuse of their dominant position as they had unduly exploited the prerogatives they held by virtue of their position as vertically integrated operators, prohibiting any conduct similar to that assessed on their part in the future.

Nevertheless, although this is extremely rare in practice, the AGCM followed up the assessment of the violation with a symbolic administrative fine imposed jointly and severally on RFI, Ferrovie dello Stato Italiane S.p.A. and Trenitalia S.p.A. of €1,000, as the AGCM considered "the context in which the complex and unified strategy of excluding other operators was pursued and, in particular, the fact that RFI's master agreement with the region in any case led to an improvement in the network infrastructure in terms of technological innovation".

Despite the symbolic fine, since the AGCM confirmed the assessment of "abusive conduct" by the FS Italiane group companies, on 30 October 2019, following specific analyses conducted with the assistance of its independent legal advisor, RFI appealed against the conclusive measure before the Lazio regional administrative court. Ferrovie dello Stato Italiane S.p.A. and Trenitalia S.p.A. have also filed similar appeals.

Appeal to the Lombardy regional administrative court - Milan section no. 492/2016 against the Electricity, Gas and Water Regulator's Resolution no. 654 of 23 December 2015

On 26 February 2016, RFI filed an appeal to the Lombardy regional administrative court against resolution no. 654/2015, with which the Electricity, Gas and Water Regulator (AEEGSI), now the Regulatory Authority for Energy, Networks and Environment (ARERA), approved the tariffs for electrical energy transmission, distribution and measurement for the 2016-2023 regulatory period. This resolution includes, inter alia, the "Integrated text of measures for the provision of electrical energy transmission and distribution services - provisions for 2016-2019", referred to as "TIT", which contains section IV regulating "special tariff regimes".

As for the special tariff regime applicable to RFI and the railway system, the new TIT provides that, as from 1 January 2016, the benefit of applying a "single virtual point" is limited solely to quantities of energy under the universal and freight services, and no longer applies to energy for market services (as monthly consumption for

these services is considered “evenly distributed between RFI’s withdrawal points” and, therefore, the maximum applicable tariff applies).

The measure introduced with the aforementioned provision entails a higher cost of energy for the market railway transport service, the greater cost of which RFI will bear at 30% for 2016 and 20% for 2017 pursuant to article 29.3 of Law decree no. 91/2014 converted into Law no. 116/2014.

Resolution no. 654/2015 has also been challenged by some railway companies.

Following the issue of European law no. 167/2017 on 20 November 2017, which introduced (in article 19) sweeping changes to article 29 of Law decree no. 91/2014, revising the scope of application of the special tariff regime, ARERA issued a new resolution, no. 922/2017/R/eel, which, as regards the regulations governing the special tariff regime applicable to RFI, replaced resolution no. 654/2015, recognising the full application of the system charges only as relates to the portion of energy i) withdrawn on grids and for services excluded from the special tariff regime, or ii) exceeding 5,000 GWh, also confirming the benefits of the “single virtual point” to the entire railway system up to the consumption of this amount.

The first hearing for the appeal is yet to be scheduled and, considering the changed legislative context, RFI intends to let the proceedings lapse.

Council of State decision no. 3348/2019 settling the case between RFI v. ARERA et al. concerning on the appeal against resolution no. 641/2013

On 16 May 2019, with decision no. 3348/2019, the Council of State admitted RFI’s appeal against the Lombardy regional administrative court’s ruling no. 1598/2014 concerning the request to cancel ARERA resolution no. 641/2013/R/COM of 27 December 2013 containing the “1 January 2014 update of the tariff components to cover general charges and other components of the electricity and gas sector”, as well as other deeds and resolutions.

The case called into question the process used to revise the criteria for the allocation of the general electrical system charges, which began with resolution no. 168/2013/R/EEL. In previous resolutions, ARERA had not classified RFI and the railway companies as “high-energy consumption companies”. However, in the resolution subject to the appeal, the various tariff components were calculated in such a way that energy for traction - which RFI purchased for the railway companies - was subject not only to charges for the new Ae tariff component (to cover the new subsidies for general electricity system charges for high-energy consumption companies) but also to all the other A tariff components applicable to monthly consumption over 12 GWh/month.

In the first-level case, the regional administrative court could not admit the appeal because it was filed past the deadline.

The Council of State’s decision preliminarily rejected the claim of inadmissibility raised by the government lawyers, confirming that the claimants had a direct, concrete and present interest in the appeal.

In this respect, the panel admitted the appeal and decided in RFI’s and the railway companies’ favour on the grounds that, although they do not operate in the manufacturing sector, energy is not a cost that can be compressed, and, on the contrary, is the only driving element for trains.

On this basis, the judge emphasised that the exclusion of RFI and the railway companies from the subsidies - which were granted to proper “high-energy consumption” companies in the resolutions against which the companies appealed - could not be justified by legislation and conflicted with the principles of the relevant directive (i.e., directive no. 2003/96/EC).

Following this decision, RFI sent a note to ARERA asking what its intentions were with respect to when and how it would implement the decision. In its reply, ARERA informed RFI that it had appealed against the Council of

State's decision before the Court of Cassation, claiming the Council of State did not have jurisdiction and concurrently highlighting technical elements that - according to ARERA - would make it particularly difficult to immediately implement the decision.

After the notification of the appeal with the Court of Cassation and also considering that which arose in talks with ARERA, RFI requested technical consultancy to analyse the cost effects on the railway system and, potentially, on the special tariff regime for the procurement of electrical energy for traction as a result of the Council of State's decision, taking into account the Council of State's classification of RFI and the railway companies as "high-energy consumption" entities.

Furthermore, the company appeared before the Court of Cassation within the terms of law.

ART decision no. 96/2015 "Criteria for determination of charges for access and use of the railway infrastructure" - Extraordinary appeal with the President of the Italian Republic

Reference should be made to previous reports for additional details on the appeals lodged by Trenitalia S.p.A. and Italo - Nuovo Trasporto Viaggiatori S.p.A. against this decision, which the Piedmont regional administrative court rejected with its rulings published on 11 January 2018. Both Trenitalia S.p.A. and Italo- Nuovo Trasporto Viaggiatori S.p.A. appealed against the Piedmont regional administrative court's ruling on April 2018.

The Piedmont regional administrative's rulings that settled the appeals lodged by a series of freight railway companies, Trenitalia S.p.A. and Italo - Nuovo Trasporto Viaggiatori S.p.A. against ART decisions nos. 75 and 80/2016 (implementing decision no. 96/15, whereby the ART had approved the compliance of the new 2016-2021 tariff system proposed by RFI for the MAP and the non-MAP services), were appealed in the early months of 2018. Following the hearing held on 21 February 2019, the Council of State issued "two preliminary ordinances" whereby it decided to have professional experts analyse the ART decisions subject to appeal, substantially concerning the sustainability of the fees to access and use the railway infrastructure operated by RFI and the services provided in such infrastructure and the correlation of such fees with the operator's costs and investments. With the ordinance of 30 September 2019, the Council of State appointed the Head of the Department of Environmental, Land and Infrastructural Engineering with the Milan Polytechnic University to conduct the analysis. RFI has not yet received any information on the expert's preliminary activities.

RFI's appeal before the Piedmont regional administrative court against decision no. 33/2016 concluding the sanction proceedings as per decision no. 64/2015

Reference should be made to previous reports for additional details. The hearing has not been scheduled for RFI's appeal against decision no. 33/2016.

Sanction proceedings under ART decision no. 126 of 20 October 2017

With decision no. 78/2018, the ART concluded the sanction proceedings commenced with decision no. 126/2017, imposing an administrative fine of €620 thousand on RFI for RFI's failure to ensure fair, non-discriminatory and transparent conditions on the market for access to the railway infrastructure, by violating the disclosure obligation with specific respect to the increase in the performance of the infrastructure to over 300 km/h.

As RFI believed there were grounds to challenge the aforementioned decision, it appealed the decision before the Turin regional administrative court. Italo - Nuovo Trasporto Viaggiatori S.p.A. (NTV) joined the appeal as co-appellant.

On 11 March 2019, ruling no. 264/2019 was published in which the administrative judge rejected the grounds of RFI's appeal, substantially finding that the "operator did [not] comply with the obligation of timely and symmetrical material information to the railway companies" and, therefore, ART's administrative fine is consistently based and supported by suitable evidence.

As RFI believed there were grounds to challenge the aforementioned decision, on 14 June 2019, it filed an appeal with the Council of State. Following the hearing held on 12 December 2019, the Council of State issued ordinance no. 8579/19 of 19 December 2019, allowing RFI's motion to access the following documents:

- a) correspondence between the MIT and the co-appellant NTV in 2012-2013 concerning the events considered in the proceedings;
- b) documentation provided by MIT to the ART on the railway companies considered for the same period;
- c) documentation relating to the proceedings concluded with ART decisions nos. 76 and 152/17.

The Council of State section granted the authorities 120 days from the date of notification or communication of the ordinance to meet the requests and set the hearing for a date to be indicated by the President following a specific motion by the most diligent party after access to the documents had been given, as ordered.

Appeal against ART decision no. 140/2017

With decision no. 140/2017, the ART notified RFI of the annual instructions and requirements for the "2019 PIR", the "2018 PIR", and for the preparation of the "2020 PIR". Unlike past decisions having the same purpose, the content of this measure is particularly intrusive and pervasive, and heavily impacts the infrastructure operator's autonomy. By way of example, but not limited to, the requirements concern the ART's full and direct access to the manager's information systems and databases, as well as the requirement to disclose to the market the document entitled "Technical Scenario" (containing the rules for planning the traffic for each section and line). In order to avoid the commencement of a new and costly sanction procedure, RFI implemented the guidelines and provisions set out in the decision in question in accordance with the set deadlines, while also lodging an appeal with the Lazio regional administrative court on 2 February 2018. However, at the pre-trial hearing, the Lazio regional administrative court declined jurisdiction (in favour of the Piedmont regional administrative court) as, in its view, the rulings related to ART measures are not under its functional jurisdiction, as the ART was not set up pursuant to Law no. 481/1995. Deeming these arguments wholly unsatisfactory and incorrect, RFI appealed with the Council of State to determine jurisdiction.

With ordinance no. 4293 issued on 13 July 2018, the Council of State ruled on RFI's motion for the determination of jurisdiction, definitively ruling that the Piedmont regional administrative court had jurisdiction for proceedings relating to ART regulations. RFI therefore reinstated the ruling concerning decision no. 140/2017 before the Piedmont regional administrative court.

With its ruling on 26 March 2019, the Piedmont regional administrative court partly admitted RFI's appeal with specific regard to its main claim, i.e., the challenge to the ART's power to directly access all RFI's information systems. In this respect, the Piedmont regional administrative court, referring to all RFI's arguments supporting its claims, noted that "There is no legal provisions that gives the ART the power indicated in paragraph 2.3.1., to directly access, in order to consult, the operator's information systems and databases".

However, the regional administrative court did not admit the grounds for the appeal in relation to the communication of the "technical scenario" (i.e., the in-house work tool that RFI uses before the determination of the service timetable describing the effects that could cause an increase in the technical time needed to travel routes) and RFI's provision of "shunting services at border plants".

This ruling became definitive when it was not appealed within the legal deadline.

Trenitalia S.p.A. and other freight railway companies' appeal against ART decision no. 43/2019

With decision no. 43/2019 published on 18 April 2019, the ART concluded the proceedings commenced with decision no. 138/2017 for compliance with the Piedmont regional administrative court's rulings nos. 1097 and 1098 of 2017 concerning the revision of RFI's tariff system.

Decision no. 43 was appealed before the Piedmont regional administrative court by a group of freight railway companies (notified to RFI on 17 June 2019) and by Trenitalia with extraordinary appeal before the Head of State (notified to RFI on 14 June 2019), subsequently transferred to the Piedmont regional administrative court following the ART's challenge.

The hearing has yet to be scheduled for both proceedings.

TAX DISPUTES

Updates on the events in 2019 are described below.

The tax disputes concerning the undue deduction - in the calculation of the regional tax on productive activities (IRAP) - of grants related to income that RFI paid to Trenitalia S.p.A. for the free transport of Free Travel Cardholders are reported below.

1) 2010

- First-level ruling (Rome Provincial Tax Court), filed on 27 April 2017, which was unfavourable for RFI with respect to both the tax and the related administrative fines;
- Second-level ruling (Rome Regional Tax Court), filed on 9 May 2019, which fully confirmed the first-level ruling.

2) 2011

- First-level ruling (Rome Provincial Tax Court), filed on 27 November 2018, which was unfavourable for RFI with respect to the tax only⁹.

3) 2012

- First-level ruling (Rome Provincial Tax Court), filed on 13 February 2019, which was unfavourable for RFI with respect to the tax only¹⁰.

With respect to 2013, on 4 December 2018, the Tax Authorities – Lazio Regional Department - Large Taxpayers Office served tax assessment notice no. TJBOC0100227/2018, which the company immediately appealed before the Rome Provincial Tax Court. On 4 February 2019, the company temporarily paid one-third of the assessed tax plus accrued interest pending the conclusion of the proceedings.

Considering the development of the case, as summarised above, the company decided not to pursue this case and instead apply the facilitated settlement procedure for tax disputes pursuant to article 6 of Law decree no. 119 of 23 October 2018, converted into Law no. 136 of 17 December 2018.

This procedure enabled the company to settle the disputes for 2010, 2011 and 2012.

⁹The administrative fines were not considered applicable as it was objectively impossible to interpret the relevant regulation.

¹⁰ See note 1.

The disputes relating to 2013 and 2014 were settled using the scale-down procedures for tax disputes and, in particular, court arrangement for 2013 and assessment with taxpayer's agreement for 2014.

Payment order no. 09720190158016310, executive registration no. 2019/007810 issued by the MIT, Higher Council for public works following the non-payment of the 0.5 per thousand (proceeds from the services performed under article 1.5 of Law decree no. 245/2005) was notified. The company has filed an appeal and petitioned the court to order suspension of the payment order. RFI has not accrued any amounts to the tax provision since, in a similar dispute in which another group company is involved, the Rome provincial tax court found that the *fumus boni juris* requirement was met on a precautionary basis and, consequently ordered the suspension of the order's executive force.

Remuneration of directors that have been assigned powers

The remuneration of the chairwoman of the board of directors and of the CEO are established by the board of directors in compliance with the "Directive regarding the adoption of the criteria and methods for the appointment of members of the board of directors and the remuneration policies for senior managers of companies directly or indirectly controlled by the Ministry of the Economy and Finance" dated 24 June 2013.

In the meetings of 28 April and 26 July 2017, RFI's board of directors set the fees of the chairwoman of the board of directors and of the CEO for their respective positions in the board of directors and for the functions respectively allocated thereto, as set out below:

CHAIRMAN OF THE BOARD OF DIRECTORS		Annual fees for 2017-2019
Fixed fee for the position		65,385
Fixed fee for powers assigned		19,615
Performance-based fee		-
CEO AND GENERAL DIRECTOR		Annual fees for 2017-2019
Fixed fee for the position		65,000
Fixed fee for powers assigned		400,000
Performance-based fee*		200,000

* Performance-based fee capped at €200,000, due upon the achievement of 100% of the company's annual objectives for each of the offices held (CEO and general director, for a total of €200,000. The fee will be calculated in proportion to the incentive criteria (under/overperformance), between €50,000 and €130,000, depending on annual performance in each position, as resolved by the board of directors based on an assessment of the achievement of objectives.

DISCLOSURES REQUIRED BY ARTICLE 2497-TER

During the year, the company did not take any decisions explicitly covered by article 2497-ter of the Italian Civil Code, although it passed resolutions in the spirit of complete agreement with the guidelines of the sole shareholder, Ferrovie dello Stato Italiane S.p.A..

RISK FACTORS

At the preparation date of this report, no particular risks and uncertainties are foreseen that could have a material impact on the company's financial position, results of operations and cash flows other than those mentioned in the notes, to which reference should be made, with regard to financial risk management (credit, liquidity, market, currency and interest rate risks).

Risk management

As part of the group's larger risk management framework, in 2019, RFI conducted a bottom-up risk assessment involving the sales, traffic and production departments, therefore focusing on the main business processes.

In line with the group guidelines, RFI performed the analysis using the risk control self-assessment, with the active participation of the risk owners (heads of management and their direct staff, typically at central level) in the identification and assessment of risks.

The process is comprised of the following stages:

- identifying the main corporate process/organisational structure targets and the related risks during workshops with division/structure managers;
- assessing the risks and controls and any improvement actions identified by the risk owners.
- combining and discussing the results and reporting.

The survey, which RFI began in the first half of the year and completed in the second half, gave it a complete view, for the scope of analysis, of the risk owners' perception of the main company objectives at risk and the related risks.

The analysis showed that, in line with the previous year, the risk level is mainly low and medium/low, which reflects the control system's mitigation capacity. The mitigation plan is subject to periodic monitoring and is currently being updated.

At the same time, during the year, as part of the intragroup work groups coordinated by the group's risk management structure, specific projects were launched to support the implementation of the risk management framework components. In particular, the company was mainly involved in the definition of methodological project risk management guidelines at group level (in terms of process, macro-responsibilities and operating methods), to be tested in the execution stage of investment projects.

The risk analysis findings are reported below, focusing on the aspects with the most external materiality.

Business risks

RFI is operating in a challenging context undergoing continuous change, with the steady evolution of the regulatory framework and of the single European railway area and with strong growth in the demand for quality mobility and services, especially in local public transport, against the backdrop of the large imbalance between public and private transport. There is also a gap in railway connectivity in terms of integration between the various mobility systems (people and freight) and uneven network service levels in the different areas of Italy. Then there are the increasingly significant effects of growing urbanisation, climate change and the fragility of the land, which require an increasingly resilient and monitored railway infrastructure.

In this context, the opportunities offered by technological innovation take a key role, also with a view to improving the infrastructure performance, as does the need to move towards integrated sustainability models serving the mobility of the future and to boost Italy's competitiveness. RFI is deeply committed to the key strategic initiatives of the station plan for the new concept of intermodal hubs and services centres, the

investment plan for the network's technological and infrastructural upgrade - also with a view to the connection with the European network -, the large-scale plan for infrastructure maintenance and the review of the models to define and plan the commercial offer and traffic management. This is all underpinned by the strategic drivers of safety, punctuality, reliability, performance improvements and efficiency, innovation and sustainability in five priority areas: stations, local public transport, long-haul, logistics and environmental and social aspects.

In a general context of change and opening to new businesses, the risks to which the company is exposed have also evolved and are broken down according to each business plan action. In order to enable the gradual implementation of the plan, the company has implemented systems for governing each initiative/project rolled out, which includes the establishment of committees, task forces and ad hoc work groups for the most significant projects, with structured periodic monitoring of their progress.

Regulatory and compliance risks

The company operates in highly regulated sectors where changes in regulatory rules, requirements and obligations can impact the performance of operations and forecast results. The external sources of uncertainty include the risk of cuts in the government financing under the Government Programme Contract, which could impact business plans and the financial statements.

In general, to mitigate the risks arising from changes in legislation and scenarios, in the management of relationships and information flows with government bodies and regulators (institutions, independent sector authorities, etc.), including in the event of potential disputes, the company is always open to holding meetings and discussions with such parties, especially when they are meaningful, organised on the basis of transparency, cooperation and pro-activeness.

Therefore, responsibility, transparency, integrity and compliance are the principles underpinning its processes, procedures, systems and conduct in compliance with the group's code of ethics. Nevertheless, given the complexity of its business and the many different activities performed, the company might be exposed to risks of non-compliance due, in general, to the potential failure to comply with legislation or regulations, with consequent sanctions, financial losses or damage to its reputation.

To uphold these principles, along with monitoring developments in legislation and regulations, which the company performs through permanent work groups and organisational safeguards, it has specific structures to conduct audits on compliance with internal and external regulations and offers training to personnel on the most important compliance issues.

Specifically, as part of the unified anti-corruption framework, an organisational anti-bribery and corruption safeguard was established and the anti-bribery and corruption system (ABC system) was updated and significantly supplemented. The ABC system provides for cross-disciplinary control principles and a set of specific prevention tools consisting of standards of conduct and indicators to monitor potential irregularities, for knowledgeable, responsible decision-making processes based on integrity, decency and legality. To help raise awareness of these values at all levels, the main action areas under the ABC system include ongoing training and communication activities. Audits on compliance with the standards of conduct and the functioning of the framework are systematically included in the scope of internal audit activities on processes classified as sensitive.

To strengthen the internal control and risk management system, the group compliance model was also defined to further prevent non-compliance risk, i.e., the risk of violating external and internal rules of conduct with repercussions on its reputation. The company is evaluating the most appropriate ways to implement the model, including the scope of activities and considering the specific characteristics of operations.

Furthermore, given the maturity of the deregulation of the markets on which the FS Italiane group companies operate, the group has begun a process to equip its companies, while respecting their autonomy and independence, with an antitrust compliance programme to improve their ability to prevent and manage antitrust risks, i.e., those related to non-compliance with regulations protecting competition and prohibiting unfair business practices. In this regard, priority has been given to the preparation of the parent's antitrust compliance programme for which, *inter alia*, specific training sessions have been held for the group's top management and those in charge of the units most exposed to antitrust and regulatory risks. The adoption of an antitrust compliance model will also be adequately assessed by the corporate compliance unit being set up.

As for the management of personal data protection, activities continued in 2019 to ensure compliance with the requirements of Regulation (EU) 2016/679 and the group's data protection framework. Specifically, RFI implemented the guidelines for data protection, the management of third parties, the rights of data subjects, the identification of potentially high-risk data treatment and the data protection impact assessment, data protection by design and by default and the management of data breaches and designated the people authorised to treat personal data.

Furthermore, with the support of the data protection officer, the company regularly continues to update the data processing log and data processing notices, manage requests from data subjects to exercise their rights, reach data protection agreements attached to outsourcing contracts and conduct data protection impact assessments.

Operational risks

Infrastructural investments in the railway system consist of complex projects requiring significant financial resources and a structured organisational and project management system that RFI, including through other group companies, has in place. There are many different events that could impact the completion of work within the scheduled time/costs and affect the quality, efficiency and availability of the railway infrastructure, which could have potential adverse effects on company results. In general, these events relate to potential changes in the legal context, lengthy authorisation processes for projects with the Italian Ministries/Bodies and difficulties in accessing sources of funding, technical changes in programmes and technical/organisational weakness on the part of contractors/general contractors (also due to financial difficulties or defaults) and/or technical parties.

To mitigate these risks, the company implements management and control procedures to constantly monitor the physical, economic and financial performance of infrastructural work and to start mechanisms to define improvement or corrective action. In this regard, specific contractual and organisational actions were implemented, aimed at bolstering supervision over investment projects by RFI as the customer. Moreover, a wide-ranging project is continuing in order to innovate the investment management procedures, optimising the IT tools used for operational management and, more generally, to support the whole-life asset management model.

Railway infrastructure is also sensitive to interruptions/issues due to faults in plant and technologies, serious natural events and acts of vandalism that could affect the provision of continuous train services in accordance with the expected quality standards. To prevent such risks, not only does the company have state-of-the-art security, control and monitoring systems, but it also carries out, with the increasingly important support of technology, specific maintenance cycles on the network and adopts procedures to manage irregularities and emergencies, and specific contingency plans, with a constant focus on updating the public and supplying accessory services to customers. In order to improve service quality, RFI has, *inter alia*, launched projects to implement systems that optimise railway timetabling and train traffic management process and established the Punctuality Committee. This committee is responsible for controlling and monitoring real punctuality and the

performance of all players. It also identifies short, medium and long-term actions in relation to traffic management, the commercial offer, technical scenario, maintenance model, investment planning and implementation and the standardisation of procedures to resolve recurrent plant faults. To maximise results and reach shared solutions, in compliance with the legislative and regulatory framework and the principles of fairness and non-discrimination, the company has also given the committee the power to convene round tables with the railway companies and, if necessary, with other parties who so request.

On this basis, the design criteria underlying the route catalogue were updated to meet the needs of increased transport demand, to ensure a sounder timetabling system, remain commercially attractive and improve the integration of the HS offer with regional services at metropolitan hubs. To control the risk of saturating more commercially valuable routes and, in general, to increase network capacity, performance and accessibility, the company is deploying projects to improve traffic flow and expand traffic capacity at large urban hubs, revising the routes that cross large terminal stations and implementing network-wide investment plans for technological upgrades.

With reference to stations and related services, steps continued to be taken for the reuse and redevelopment of the buildings/areas - including for social purposes - to improve accessibility, availability, appearance and security for passengers/customers. Projects are also under way to facilitate links and exchanges with other modes of transport and to deploy digital technologies to make travel information and other station utilities more innovative and efficient. As mentioned, these actions fall within the broader project to provide customers with additional, complementary services over the term of the plan, consistent with the new concept of the station as not only a transport hub but also as a local attraction and services hub. To support this change process, RFI has centralised the identification of development strategies for all stations and related services, the governance and monitoring of the commercial upgrade policies and the identification of standard layouts for stations and train traffic management services with RFI.

RFI is constantly committed to informing its stakeholders about the activities carried out and the targets achieved, monitoring and reporting the results as part of a continuous performance improvement process. Specifically, to expand the services offered, guide the corporate choices and enhance and protect its image, RFI's external communications take place - in coordination with the parent - via structured processes of observation, liaising and management of relations with the media.

Procurement risks

In general, the company has centralised procurement management and, for railway system services and specialist skills, it uses specific vetting provider systems and lists of professionals with excellent track records. To ensure the increasingly efficient use of government resources, RFI is conducting a project to redefine the procurement process based on an analytical model to determine the ideal price of procurement, while also making the process faster, simpler, traceable and paperless. Specifically, the aims of this project are to minimise the time needed to complete the procurement process (from the definition of the specific materials to accounting), to ensure continuity at work sites by making order deliveries more punctual and to reduce the amount of capital in stocks at local units and the central warehouse.

Through its specialised units, the company monitors market fluctuations in the procurement prices of materials that are fundamental for the business and any regulations governing them. This is part of its implementation of procurement management policies aimed at mitigating risks, i.e. steps taken to protect the company's interests

(e.g., by using master agreements in which prices are fixed for the entire contractual term with price revision clauses when certain margins are exceeded).

Specifically, with respect to the electricity sector and the various resolutions changing the cost of energy issued by ARERA in the past few years, changes in the context continue to be constantly monitored. Reference should be made to the "Legislative and regulatory framework" paragraph for more information in this respect.

To limit possible situations in which the company relies on builders/suppliers and to reinforce its railway know-how, the company has begun the progressive in-sourcing of critical maintenance and the construction of infrastructure, plant technological operation and production processes for railway components and, for strategic supplies, has defined emergency stock levels, how to reconstitute these stocks and supplier diversification policies. In addition to this, there were initiatives designed to identify a general risk assessment model for RFI suppliers to help make the best choices for materials (including strategic) supplies, as well as specific actions to benefit sustainability by extending the inclusion of Corporate Social Responsibility (CSR) performance scoring to all technical/economic tenders called by RFI.

ICT (Information and Communication Technology) risks

The company operates using IT systems/platforms to coordinate and plan activities with respect to train traffic management and the related services, the sale of train paths, procurement management, maintenance and investments, to monitor stocks and for a number of other activities, including the management of accounting processes. The hardware and software that is used could be damaged by human errors, natural disasters, power outages or other events. Unexpected problems in structures, system failures or cyber attacks could influence service quality and cause interruptions and slowdowns and/or block company activities with resulting financial impacts and on its reputation.

In order to ensure the continuous availability, integrity and confidentiality of IT data, RFI is equipped with prevention and protection systems (back-up procedures, authentication and use profiling procedures, firewalls, etc.) and has also strengthened and expanded its security (via vulnerability checks, penetration tests, etc.) and business continuity/disaster recovery processes, particularly for business-critical systems.

In connection with the establishment of FSTechnology, the FS Italiane group's ICT service provider, and the consequent transfer of RFI's ICT business unit to this company, an Interdepartmental Committee was set up to coordinate IT investments and development and control IT service levels and quality. In general, the committee defines and implements the IT system development plan and the related priority actions in accordance with the business plan and the related business targets. It also ensures the most efficient and effective interfaces with FSTechnology, to guarantee business continuity and meet development/design and system running needs.

Effects of the spread of infectious diseases

The global spread of a disease, creating epidemiological or pandemic emergencies that affect local populations (such as COVID-19 or coronavirus) may cause, in addition to a deterioration of macroeconomic conditions, slowdowns in business activity due to restrictions imposed by national and foreign authorities, the unavailability of personnel, difficulties faced by customers in using collective mobility services and disruptions in the supply chain, which may have adverse effects on the company's results.

The company has adopted processes and procedures that support the identification, management and monitoring of events with potential impacts on its resources and business. These processes are meant to optimise the timeliness and efficiency of the actions taken.

BUSINESS OUTLOOK

The company expects to operate in a macroeconomic scenario presenting moderate prospects of growth for Italy in 2020. Global economic risks relate to the trade war between the US and China, although it is showing signs of attenuation, and a substantial slowdown in the Chinese economy the effects of which are not yet foreseeable, partly due to the pandemic.

Projections for the Italian economy, which are highly dependent on the external factors described above, show slight growth in GDP in 2020, ranging from 0.3% to 0.5%, and only reaching 0.9% at the end of 2022 when the international cycle is expected to have regained vitality necessary to support exports and investments. The expected progressive recovery of global demand and expansive financial conditions should drive investments, despite their persistent uncertainty. The labour market is also expected to reflect these favourable circumstances, as the unemployment accumulated over the course of the long financial crisis should continue to decline, while inflation should settle at around 0.9% in 2020, before rising to 1.4% in 2022. In this context, to stimulate a weak economy that is taking longer to recover than it should, the ECB's monetary policy has remained substantially the same, which is to say focused on keeping interest rates near zero. In line with the current economic situation, exports and imports were weak in the year just ended and will remain so in 2020, gradually improving in the subsequent years.

This macroeconomic context forms the basis for the 2020 budget approved by the board of directors on 18 December 2019, in line with the 2019-2023 business plan approved by the board of directors on 6 February 2019. The 2019 - 2023 plan is geared towards creating economic, environmental and social value, with a focus on maintaining the quality of production, strengthening the company's thirst for new challenges, its penchant for technological innovation and digitalisation and its commitment to developing human capital throughout the FS Italiane group companies.

In a continuously evolving context, the company has set the goal of devoting increasingly more attention to safety, digitalisation and sustainability, both as a long-term strategy and in its review of day-to-day decisions and good practices, making these the cardinal principles of its vision and using technological innovation as a vital lever to achieve them.

To drive a widespread company culture of sustainability, RFI is working with the parent to develop specific training and awareness initiatives that progressively reach the company's entire population.

The company's new strategic vision places a greater focus on its railway core business, in accordance with the shareholder's strategic guidelines and an approach which places the customer at the centre of its operating and industrial processes.

Therefore, RFI confirms its five priority action areas: Stations (with a new concept of the station as a modal integration hub and by redeveloping the areas around the station), Local public transport (upgrades, greater speed and more stations), Long haul (upgrades and greater speed on the main European lines, and airport links), Logistics (connecting ports, interports, production districts and greater international cooperation between operators), and Environmental and social aspects (water and energy efficiency, green procurement and allocating assets not used in operations for social purposes).

The pursuit of such ambitious targets has led the company to renew its commitment in all business areas and entails the availability of an adequate level of public resources as the enabling factor, both in terms of the operating aspects and long-term plans.

Considering the public funding context, RFI's railway investment plan is dependent on the public funds supporting railway transport development. The financial resources included in the Government Programme Contract - Services (GPC-S) and Investments (GPC-I) approximate €89 billion, including the additional €15.4 billion allocated by the 2018-2019 update to the 2017-2021 GPC-I currently being finalised, form the basis for the detailed planning of the works already commenced/financed, which are expected to give the greatest returns in the short-term in terms of performance gains, the compliance and safety level of infrastructure, improvements in service quality and the development of traffic volumes.

Specifically, the approval process required by law for the 2017-2021 Government Programme Contract - Investments was concluded in 2019, making it fully effective. The CIPE also approved the 2018-2019 update to the GPC in 2019 and the approval process required by law should be completed in 2020, thereby releasing the resources allocated in the update and, particularly, those allocated in the 2018 Budget Act (approximately €6 billion) and the 2019 Budget Act (roughly €7 billion).

The 2020 Budget Act allocated additional resources through a specific "Fund to relaunch investments by the government's central administrations and develop the country", with total resources of €20.8 billion, including those to be allocated for RFI's investments, which the relevant Ministries are currently quantifying.

At the same time, the company continues seek for financing for programmes co-financed by the European Union, such as the 2014-2020 national operating programmes (PON) and the regional operating programmes (POR), and for the financing of the Trans-European networks ("2014-2020 Connecting Europe Facility").

With respect to the resources allocated in chapter 1541 of the MEF's budget for ordinary maintenance and safety, security and ferrying under the Government Programme Contract - Services, the 2020 Budget Act restored the financing of €100 million for each of the three years from 2020 to 2022 which had been defunded by the 2018 Budget Act.

Reference should be made to the section on "Events after the reporting date" in the notes to the financial statements for more extensive information on the COVID-19 ("coronavirus") outbreak in the first few months of 2020.

The Chairwoman

FINANCIAL STATEMENTS AT 31 DECEMBER 2019
~~FINANCIAL STATEMENTS~~

STATEMENT OF FINANCIAL POSITION

	Note	31.12.2019	31.12.2018
<i>Euros</i>			
Assets			
Property, plant and equipment	(8)	34,134,291,747	33,535,518,619
Investment property	(9)	1,114,517,288	1,103,868,150
Intangible assets	(10)	695,256,574	631,180,985
Deferred tax assets		–	–
Equity investments	(11)	141,555,961	135,655,960
Financial assets (including derivatives)	(12)	575,395,107	1,163,950,985
Trade receivables	(15)	1,676,576	1,690,439
Other assets	(13)	4,037,578,944	3,439,293,391
Total non-current assets		40,700,272,197	40,011,158,529
Inventories	(14)	863,848,979	741,217,075
Trade receivables	(15)	676,855,930	684,023,551
Financial assets (including derivatives)	(12)	689,333,428	673,106,410
Cash and cash equivalents	(16)	540,334,140	719,743,100
Tax assets	(17)	16,515,637	17,055,900
Other assets	(13)	2,125,444,149	2,840,232,839
Total current assets		4,912,332,263	5,675,378,875
Assets held for sale and disposal groups	(7)	–	3,478,000
Total assets		45,612,604,460	45,690,015,404
Equity			
Share capital	(18)	31,528,425,067	31,528,425,067
Reserves	(18)	157,488,956	148,428,124
Valuation reserves	(18)	(184,174,945)	(190,019,283)
Retained earnings	(18)	1,911,630,567	1,751,144,183
Profit for the year	(18)	301,933,002	274,196,193
Total equity		33,715,302,647	33,512,174,284
Liabilities			
Loans and borrowings	(19)	2,497,189,276	3,023,039,622
Post-employment and other employee benefits	(20)	513,963,378	594,735,354
Provisions for risks and charges	(21)	473,714,028	524,901,643
Deferred tax liabilities		–	–
Financial liabilities (including derivatives)	(22)	53,570,861	17,947,444
Trade payables	(24)	18,682,221	18,722,374
Other liabilities	(23)	122,878,990	111,478,039
Total non-current liabilities		3,679,998,754	4,290,824,476
Loans and borrowings and current portion of non-current loans and borrowings	(19)	1,740,196,258	684,259,551
Trade payables	(24)	3,180,907,749	3,199,928,343
Tax liabilities		43,581	99,750
Current financial liabilities (including derivatives)	(22)	14,006,040	912,133
Other liabilities	(23)	3,282,149,431	4,001,816,867
Total current liabilities		8,217,303,059	7,887,016,644
Liabilities held for sale and disposal groups		–	–
Total liabilities		11,897,301,813	12,177,841,120
Total equity and liabilities		45,612,604,460	45,690,015,404

* The company applied IFRS 16 for the first time on 1 January 2019. Under the transition method chosen, comparative information has not been restated.

INCOME STATEMENT

	Note	2019	Euros 2018
Revenue from sales and services	(25)	2,650,196,426	2,633,307,061
Other income	(26)	149,160,989	157,171,983
Total revenue		2,799,357,415	2,790,479,044
Personnel expense	(27)	(1,520,424,449)	(1,497,434,753)
Raw materials, consumables, supplies and goods	(28)	(889,089,520)	(1,010,373,033)
Services	(29)	(744,343,871)	(695,502,541)
Use of third-party assets	(30)	(32,624,686)	(53,721,102)
Other operating costs	(31)	(124,570,585)	(137,534,172)
Internal work capitalised	(32)	992,525,234	1,053,043,665
Total operating costs		(2,318,527,877)	(2,341,521,936)
Amortisation and depreciation	(33)	(118,739,101)	(106,028,733)
Net impairment gains	(34)	(23,665,447)	(5,061,513)
Accruals	(35)	12,177,721	(26,000,000)
Operating profit		350,602,711	311,866,862
Net financial expense		(34,401,342)	(37,670,669)
Financial income	(36)	8,513,329	716,687
Financial expense	(37)	(42,914,671)	(38,387,356)
Pre-tax profit		316,201,369	274,196,193
Income taxes	(39)	(14,268,367)	–
Profit from continuing operations		301,933,002	274,196,193
Profit (loss) from assets held for sale, net of taxes		–	–
Profit for the year		301,933,002	274,196,193

* The company applied IFRS 16 for the first time on 1 January 2019. Under the transition method chosen, comparative information has not been restated.

STATEMENT OF COMPREHENSIVE INCOME

	Note	2019	<i>Euros</i> 2018
Profit for the year		301,933,002	274,196,193
Items that will not be reclassified to profit or loss			
Actuarial gains (losses)	(18)	(11,521,490)	9,648,917
Tax effect on actuarial gains (losses)			
Items reclassified to profit or loss	(18)	13,491,509	16,045,776
Items that will or may be reclassified to profit or loss, net of the tax effect provided that they meet specific conditions:			
Cash flow hedges - effective portion of changes in fair value	(18)	3,874,319	5,141,941
Net exchange gains (losses)			
Cash flow hedges - tax effect of the effective portion of changes in fair value			
Available-for-sale financial assets			
Tax effect of available-for-sale financial assets			
Other comprehensive income, net of the tax effect		5,844,338	30,836,634
Comprehensive income		307,777,340	305,032,827

**The company applied IFRS 16 for the first time on 1 January 2019. Under the transition method chosen, comparative information has not been restated.*

STATEMENT OF CHANGES IN EQUITY

(Euros)									
Equity									
	Share capital	Reserves			Other reserves	Total reserves	Retained earnings	Profit for the year	Total equity
		Legal reserve	Hedging reserve	Actuarial reserve					
Balance at 1 January 2018	31,525,279,633	56,845,036	(80,819,364)	(140,036,553)	50,000,000	(114,010,881)	1,602,718,452	261,500,769	33,275,487,973
Dividend distribution						-		(100,000,000)	(100,000,000)
Allocation of profit for the previous year		13,075,038				13,075,038	148,425,731	(161,500,769)	-
Changes due to demerger						-			-
Recognised profits/(losses) of which:						-			-
Cash flow hedges - effective portion of changes in fair value			5,141,941			5,141,941			5,141,941
Net actuarial gains				9,648,917		9,648,917			9,648,917
Other changes			16,045,776			16,045,776			16,045,776
Non-recurring transactions	3,145,434				28,508,050	28,508,050			31,653,484
Profit for the year						-	274,196,193		274,196,193
Balance at 31 December 2018	31,528,425,067	69,920,074	(59,631,647)	(130,387,636)	78,508,050	(41,591,159)	1,751,144,183	274,196,193	33,512,174,284
Balance at 1 January 2019	31,528,425,067	69,920,074	(59,631,647)	(130,387,636)	78,508,050	(41,591,159)	1,751,144,183	274,196,193	33,512,174,284
Dividend distribution								(100,000,000)	(100,000,000)
Allocation of profit for the previous year		13,709,810				13,709,810	160,486,383	(174,196,193)	-
Recognised profits/(losses) of which:						-			-
Cash flow hedges - effective portion of changes in fair value			3,874,319			3,874,319			3,874,319
Net actuarial losses				(11,521,490)		(11,521,490)			(11,521,490)
Other changes			13,491,509			13,491,509			13,491,509
Non-recurring transactions					(4,648,978)	(4,648,978)			(4,648,978)
Profit for the year							301,933,002		301,933,002
Balance at 31 December 2019	31,528,425,067	83,629,884	(42,265,819)	(141,909,126)	73,859,072	(26,685,988)	1,911,630,566	301,933,002	33,715,302,647

The company applied IFRS 16 for the first time on 1 January 2019. Under the transition method chosen, comparative information has not been restated.

STATEMENT OF CASH FLOWS

	Note	2019	Euros 2018
Profit for the year		301,933,002	274,196,193
Amortisation and depreciation	(33)	118,739,101	106,028,733
Income taxes	(39)	14,268,367	
Net financial expense	(36)(37)	36,651,043	32,427,465
Accruals to the provisions for risks	(27)(29) (31)(35)	51,149,752	62,744,346
Impairment losses	(34)(37)	23,318,143	4,992,951
Accruals for employee benefits	(20)	3,126,597	3,745,907
Accruals to provisions and impairment losses		77,594,492	71,483,203
Gains on sales	(26) (31)	(75,434,801)	(59,093,121)
Change in inventories	(14)	(122,631,904)	(42,776,057)
Change in trade receivables	(15)	(485,090)	(169,536,246)
Change in trade payables	(24)	(19,170,503)	164,258,364
Change in other assets and liabilities	(5) (13) (17) (23)	(535,667,925)	(833,451,138)
Utilisation of the provisions for risks and charges	(21)	(102,337,367)	(53,599,495)
Payment of employee benefits	(20)	(95,017,889)	(72,940,949)
Net financial expense paid	(36)(37)	(119,388,664)	(137,295,676)
Taxes paid	(39)	(5,349,273)	(601)
Net cash flows used in operating activities		(526,297,411)	(720,299,325)
Increases in property, plant and equipment	(8)	(4,614,884,856)	(4,641,496,777)
Investment property	(9)	(432,306)	(113,102)
Increases in intangible assets	(10)	(113,050,936)	(135,875,265)
Increases in equity investments	(11)	(118,552,000)	(128,746,000)
Investments, before grants		(4,846,920,098)	(4,906,231,144)
Grants for property, plant and equipment	(8)	4,046,289,655	4,692,561,640
Grants for investment property	(9)	-	-
Grants for intangible assets	(10)	-	-
Grants for equity investments	(11)	112,344,000	125,068,000
Grants		4,158,633,655	4,817,629,640
Decreases in property, plant and equipment	(8)	18,527,532	79,321,237
Decreases in investment property	(9)	1,114,663	3,648,864
Decreases in intangible assets	(10)	-	-
Decreases in equity investments and profits	(11)	9,740,500	-
Decreases		29,382,695	82,970,101
Net cash flows used in investing activities		(658,903,748)	(5,631,403)
Disbursement and repayment of non-current loans	(19)	(526,884,777)	(298,818,273)
Disbursement and repayment of current loans	(19)	1,056,918,999	(28,320,675)
Change in lease liabilities	(22)	(13,169,523)	
Change in financial assets	(12)	598,502,279	604,023,870
Change in financial liabilities	(22)	105,850	22,578
Dividends	(18)	(100,000,000)	(100,000,000)
Non-recurring transactions /other changes in equity	(18)	(911,975)	2,039,098
Net cash flows generated by financing activities		1,014,560,853	178,946,598
Total cash flows		(170,640,306)	(546,984,130)
Opening cash and cash equivalents		810,406,521	1,357,390,651
Closing cash and cash equivalents	(12) (16)	639,766,215	810,406,521
of which: intragroup current account		99,432,074	90,663,158

* The company applied IFRS 16 for the first time on 1 January 2019. Under the transition method chosen, comparative information has not been restated.

NOTES TO THE FINANCIAL STATEMENTS

1. Introduction

Rete Ferroviaria Italiana (the “company” or “RFI”) is a company set up in accordance with Italian law and is based in Italy. Its registered office is in Rome.

It is managed and coordinated by Ferrovie dello Stato Italiane S.p.A..

The directors approved these financial statements on 4 March 2020 and they will be made available to the shareholder for approval and subsequent filing within the terms established by law. The shareholder has the power to make changes to these financial statements.

The company opted not to prepare consolidated financial statements in accordance with the exemption allowed by IFRS 10. The consolidated financial statements are prepared by Ferrovie dello Stato Italiane S.p.A. which is RFI’s direct parent. This company has its registered office in Piazza della Croce Rossa 1, Rome, and the consolidated financial statements can be obtained at the above address in accordance with the terms and methods set out in the current regulations.

KPMG S.p.A. was appointed independent auditor for the 2017-2019 three-year period.

2. Basis of preparation

These financial statements have been prepared in accordance with IFRS (which include the International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS)) issued by the International Accounting Standards Board (IASB) and the interpretations issued by the International Financial Reporting Interpretations Committee (IFRIC) and the Standing Interpretations Committee (SIC), endorsed by the European Union pursuant to Regulation (EC) no. 1606/2002 and in effect at the reporting date (“IFRS”). Specifically, the company consistently applies the IFRS to all periods presented in these financial statements.

Furthermore, these financial statements have been prepared on the basis of the best knowledge of the IFRS and considering best practices in this respect. Any future guidance and interpretations will be applied in future years, as established by the standards over time.

The financial statements have been prepared and presented in Euro, which is the company’s functional currency, i.e., the currency of the primary economic environment in which it operates. Unless otherwise stated, all amounts included in the tables and comments of the following notes are expressed in thousands of Euros.

These financial statements comprise a statement of financial position, an income statement, a statement of comprehensive income, a statement of changes in equity, a statement of cash flows and the notes thereto. Specifically:

- the statement of financial position has been prepared by classifying assets and liabilities as “current/non-current”, with the specific separation of assets/liabilities held for sale or included in a disposal group;
- the income statement has been prepared by classifying operating costs by nature, indicating the profit (loss) from continuing operations separately from any profit (loss) from discontinued operations;
- the statement of comprehensive income includes the profit (loss) for the year and other changes in equity attributable to transactions that are not carried out with owners in their capacity as owners;

- the statement of changes in equity shows the profit (loss) for the year separately from any other changes not through profit or loss;
- the statement of cash flows has been prepared by presenting cash flows from operating activities using the indirect method.

The annual report also includes the directors' report accompanying the financial statements.

These financial statements have been prepared on a going-concern basis, as the directors established that there are no financial or operational indicators or any other indications of critical issues about the company's ability to meet its obligations in the foreseeable future and, specifically, in the next twelve months. Reference should be made to note 5 - Financial risk management for a description of the company's financial risk management procedures.

The financial statements have been prepared on the historical cost basis, except for those items which are measured at fair value, as required.

Furthermore, "current" refers to the 12 months immediately after the reporting date, while "non-current" refers to periods more than 12 months after the reporting date.

These financial statements have been prepared using the same accounting policies applied when drawing up the financial statements at 31 December 2018, except for that set out below.

3. Accounting policies

The most significant accounting policies applied to the preparation of these financial statements are described below.

Property, plant and equipment

Property, plant and equipment are recognised at purchase or production cost, net of accumulated depreciation and impairment losses, if any. The purchase or production cost includes any charges that are directly incurred to make assets available for use, as well as dismantlement and removal charges, if any, that will be incurred as a result of contractual obligations that require the asset to be returned to its original conditions. Any financial expense that is directly attributable to the acquisition, construction or production of qualifying assets is capitalised and depreciated on the basis of the useful life of the asset to which it refers. It is no longer capitalised when all operations to bring the asset in the conditions necessary to ensure its use have been completed. Leasehold improvements or costs to upgrade and transform property, plant and equipment are recognised under assets.

Any charges incurred for ordinary maintenance and repairs are directly taken to profit or loss when incurred. Costs to upgrade or replace an existing element or for extraordinary maintenance are capitalised as a direct increase in the asset. Where inspections or replacement of parts at regular intervals are planned, the related charges are capitalised.

Depreciation begins when the asset becomes available for use and is calculated based on the cost of the asset, net of the residual amount, being the estimated recoverable amount of the infrastructure at the end of the concession.

Depreciation is charged systematically and on a straight-line basis at variable rates based on train-km production volumes. "Train-km" means the total number of kilometres travelled by trains on a railway infrastructure expressed in millions/year. Specifically, depreciation is calculated based on the ratio of quantities generated in the year to total production expected throughout the concession term, applied to the depreciable cost of the infrastructure at the reporting date, and considering future investments which guarantee a sufficient efficiency and security level of the infrastructure equal to that of the current year (in particular, extraordinary maintenance and renewals), being fully covered by grants and therefore economically borne by the government. Consequently, future investments are considered in the calculation of the infrastructure's total production capacity, and, accordingly, with an impact on the calculation of the depreciation rate. If there are no government grants, the depreciation of the network is calculated based on the ratio of quantities generated in the year to total production expected throughout the concession term, without considering those related to the future costs necessary to ensure the efficiency of the infrastructure in the same period (in particular, extraordinary maintenance and renewals).

The depreciable cost of investments is the sum of all costs incurred not yet amortised, including any interest expense accrued during or for the development of assets, net of grants related to assets, excluding the expected residual carrying amount of the railway infrastructure at the end of the concession, in order to consider the related transferability against consideration.

Property, plant and equipment which, together with intangible assets and investment property, make up the railway infrastructure, comprise seven lines as shown in the table below.

For each line, RFI uses the number of train-km actually sold during the year and resulting from the company's specific monitoring system, as the indicator of the quantity generated during the year.

The depreciation rates applied in 2019 and 2018 are as follows:

	Production indicators	
	2019	2018
Pe valley line Padana cross- road and international transits (Line A)	2.29%	2.27%
North Tyrrhenian line and confluent lines (Line B)	2.38%	2.23%
Backbone and confluent lines (Line C)	2.28%	2.23%
South Tyrrhenian line (Line D)	2.27%	2.27%
Adriatic line and Apennines cross-rails (Line E)	2.33%	2.29%
Complementary network (Line F)	2.30%	2.24%
HS/HC network (Line G)	2.10%	2.18%

The depreciation rates and the residual carrying amount are revised and updated where necessary at each year end. Land is depreciated only in respect of capitalised reclamation costs.

Property, plant and equipment are derecognised when they are sold or when no more future economic benefits are expected from their use or disposal. Any gain or loss (calculated as the difference between the disposal amount, net of sale costs, and the carrying amount) is recognised in profit or loss in the year the asset is derecognised.

Leased assets

i. Identification

At the inception date of the lease (i.e., the earlier of the date of a lease agreement and the date of commitment by the parties to the principal terms and conditions of the lease) and, subsequently, the company reassesses whether a contract is, or contains, a lease only if the terms and conditions of the contract are changed. In particular, a contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. For a contract that is, or contains, a lease, the company accounts for each lease component within the contract as a lease separately from non-lease components of the contract, which are accounted for in accordance with other standards.

The commencement date is the date on which a lessor makes an underlying asset available for use by a lessee. It is determined by assessing the length of the non-cancellable period of a lease, i.e., the period in which the contract is enforceable, including any rent-free periods provided to the lessee by the lessor. In addition to this term, the company considers:

- the period covered by the option to renew the lease if the company is reasonably certain to exercise the renewal option;
- periods after the termination option if the company is reasonably certain not to exercise the option.

Options to terminate the lease held only by the lessor are not considered.

The company has opted not to recognise short-term leases (i.e., those with a term of 12 months or less) or leases for low-value assets (i.e., assets that, when new, are worth €5,000 or less or leases with a contractual

value of €5,000 or less) in accordance with IFRS 16. The company recognises the lease payments associated with these types of leases as an expense on either a straight-line basis over the lease term or another systematic basis if that basis is more representative of the pattern of the lessee's benefit.

ii. Subsequent measurement

At the commencement date of a lease, the company recognises the right-of-use asset under the relevant non-current assets caption depending on the nature of the asset subject to the lease contract and the lease liability in current and non-current financial liabilities. The right-of-use asset is initially measured at cost, including the amount of the initial measurement of the lease liability, adjusted by any lease payments made at or before the commencement date, plus any initial direct costs incurred by the lessee and an estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, less any lease incentives received

The company measures the lease liability at the present value of the remaining lease payments, discounted using the interest rate implicit in the lease for the remainder of the lease term, if that rate can be readily determined, or the lessee's incremental borrowing rate if it cannot. The lease payments included in the measurement of the lease liability include fixed payments, variable lease payments that depend on an index or a rate, any residual value guarantees, the exercise price of a purchase option (if the company is reasonably certain to exercise that option), the exercise price of an extension option (if the company is reasonably certain to exercise that option) and payments of penalties for terminating the lease (if the lease term reflects the lessee exercising an option to terminate the lease).

The right-of-use asset is subsequently depreciated on a straight-line basis over the entire term of the contract, unless the contract provides for the transfer of ownership at the end of the lease or the cost of the lease reflects the fact that the purchase option will be exercised. If the lease transfers ownership of the underlying asset to the lessee by the end of the lease term, the company depreciates the right-of-use asset from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are calculated using the same depreciation requirements as those for the relevant intangible assets or property, plant and equipment. Furthermore, the right-of-use asset is recognised net of any impairment losses on the cash-generating unit (CGU) and is adjusted to reflect the remeasurement of the lease liability.

The lease liability is subsequently measured at amortised cost using the effective interest method and is remeasured whenever there is a change in future lease payments resulting from a change in an index or a rate used to determine those payments, a change in the amount that the company expects to be payable under a residual value guarantee or when the company changes its assessment of an option to purchase the underlying asset or extend or terminate the lease. If the lease liability is remeasured, the company adjusts the right-of-use asset. If the carrying amount of the right-of-use asset is reduced to zero, any remaining amount is recognised in profit or loss.

In the statement of financial position, the company includes right-of-use assets within the same captions as those within which the corresponding assets would be presented if they were owned, and the lease liabilities in other financial liabilities. In the income statement, interest expense on the lease liability is a component of financial expense and is presented separately from the depreciation charge for the right-of-use asset.

Applicable before 1 January 2019

The company applied IFRS 16 using the modified retrospective approach. Therefore, comparative information has not been restated and continues to be presented in accordance with IAS 17 and IFRIC 4. Specifically, with respect to the comparative data at 31 December 2018, property, plant and equipment held under finance leases, through which the risks and rewards incidental to ownership are substantially transferred to the company, are recognised as assets at their fair value on the date the lease was signed or, if lower, at the present value of minimum lease payments, including the amount to be paid to purchase the asset, if any. The corresponding liability to the lessor is recognised under financial liabilities. Assets are depreciated using the above rates and criteria, unless the term of the lease is below that of the useful life reflected by said rates and there is no reasonable certainty that ownership of the leased asset will be transferred at the natural expiry of the lease. In this case, depreciation reflects the lease term. Leases whereby the lessor substantially retains the risks and rewards associated to ownership of the assets are classified as operating leases. Operating lease costs are recognised on a straight-line basis in profit or loss over the term of the lease.

Investment property

Investment property is property held to earn rentals and/or for capital appreciation rather than for sale in the ordinary course of business. Furthermore, investment property is not used in the production or supply of goods or services or for administrative purposes. This caption is recognised using the criteria applied to Property, plant and equipment.

If a property development project is launched to be subsequently sold, the properties are reclassified to inventories following the change in use. Their carrying amount at the date of the change in use is considered a cost for subsequent recognition under inventories and depreciation is suspended.

Transfers to, or from, investment property are made only when there is a change in use. In and of itself, a change in management's intentions for the use of a property does not provide evidence of a change in use.

Intangible assets

Intangible assets are identifiable, non-monetary assets without physical substance, that can be controlled and can generate future economic benefits. They are recognised at purchase and/or production cost incurred to make the asset available for use, net of accumulated amortisation and impairment losses, if any. Interest expense, if any, that accrues during and for the development of intangible assets, is considered part of the purchase cost.

Amortisation begins when the asset is available for use and is calculated using the criteria applied to property, plant and equipment.

The gain or loss arising from the derecognition of an intangible asset is equal to the difference between the net disposal proceeds and the carrying amount of the asset. It is recognised in profit or loss when the asset is derecognised.

Intangible assets comprise: development expenditure; concessions, licences, trademarks and similar rights; assets under development and payments on account.

Research expenditure is recognised in profit or loss when incurred, while development expenditure is recognised under intangible assets when all the following conditions are met:

- the project is clearly identified and any costs referred thereto are identifiable and can be measured reliably;
- the technical feasibility of completing the project can be demonstrated;
- the intention to complete the project and to sell the generated intangible assets can be demonstrated;
- there is a potential market or, in case of internal use, it is demonstrated that the intangible asset is useful for the production of the intangible assets generated by the project;
- technical and financial resources are available which are necessary to complete the project.

If the research phase of an identified internal project to create an intangible asset cannot be distinguished from the development phase, the expenditure on that project is fully charged to profit or loss as if it had been incurred in the research phase only.

Service concession arrangements

Service concession arrangements, where the grantor is a public sector entity and the operator is a private sector entity (public-to-private) fall under the scope of IFRIC 12 only when the requirements for service regulation and control of the residual interest are met. This interpretation is applied when the infrastructure is essential to provide the public with services and the arrangement establishes that the grantor:

- controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price; and
- controls - through ownership or otherwise - any significant residual interest in the infrastructure at the end of the term of the arrangement.

The company does not recognise infrastructure for concessions under the scope of IFRIC 12 as property, plant and equipment but rather recognises at fair value either alternatively or jointly: the intangible asset, if the operator has the right to charge users of the public service for the construction or upgrading of the infrastructure; and the financial asset when its construction or upgrade generate an unconditional contractual right to receive cash from or at the direction of the grantor and the grantor has little, if any, discretion to avoid payment. The operator recognises revenue and costs in line with the contractual terms and the stage of completion as provided by construction contracts. Revenue from the prices paid by users continues to be recognised in line with that set out in the subsequent paragraph on revenue recognition. Any intangible assets are amortised over the concession term using a method that reflects the estimated consumption of the economic benefits embedded in the right and the manner of consumption. Accordingly, amortisation is calculated considering the concession term. Provisions for concession commitments include accruals made for the operator's obligation to restore the infrastructure to a specified condition or replace the infrastructure to return it to its normal state of use. They are made when the concession arrangement includes these obligations and the grantor does not receive additional financial benefits.

Impairment losses on intangible assets and property, plant and equipment

Intangible assets and property, plant and equipment with a finite useful life

At each reporting date, a test is carried out to check if there is any evidence that property, plant and equipment, intangible assets and investment property may be impaired. For this purpose, account is taken of both external and internal sources of information. With respect to internal sources of information, the following must be considered: the obsolescence or physical wear and tear of the asset, significant changes, if any, in the use of the asset and the economic performance of the asset with respect to expectations. As regards external sources of

information, the following must be considered: the trend in the market prices of the assets, negative changes, if any, in technology, markets or laws, the trend in market interest rates or in the cost of capital used to measure investments.

If any such indication exists, the company estimates the recoverable amount of the asset, recognising the impairment loss in profit or loss. The recoverable amount of an asset is the higher of its fair value less costs of disposal and its value in use, i.e., the present value of the future cash flows expected to be derived from the asset. In calculating value in use, the expected future cash flows are discounted using a discount rate which reflects the time value of money, compared to the investment period and risks specific to the asset. The recoverable amount of an asset that does not generate largely independent cash flows is calculated in relation to the cash-generating unit to which this asset belongs.

Impairment losses are recognised in profit or loss when the carrying amount of the asset, or of the related cash generating unit to which the asset is allocated, exceeds its recoverable amount. Impairment losses on cash generating units are first allocated to reduce the assets of the unit pro rata on the basis of the carrying amount of each asset in the unit and within the limits of the related recoverable amount. If the reasons for a previously recognised impairment loss no longer apply, the carrying amount of the asset is reversed in profit or loss without exceeding the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years and had the related amortisation or depreciation been charged.

Intangible assets not yet available for use

The recoverable amount of intangible assets not yet available for use is tested for impairment every year or more frequently if there is an indication that the asset may be impaired.

Investments in subsidiaries, associates, joint arrangements and other investments

Investments in subsidiaries, associates and joint arrangements are measured at cost, including directly-attributable costs, adjusted for impairment.

The company's investments in companies that are neither subsidiaries or associates and which are not listed in an active market and for which the use of an appropriate measurement model is not reliable, are in any case measured at cost which is deemed to reflect the best estimate of fair value.

Impairment losses on investments measured at cost are recognised in profit or loss. If the reasons for an impairment loss no longer apply, the carrying amount of the investment is reversed up to its original cost. Impairment gains are recognised in profit or loss.

Business combinations

IFRS 3 defines business combinations as the combination of separate entities or businesses in one single reporting entity.

A business combination may be structured in a variety of ways for legal, taxation or other reasons. It may also include the acquisition, by an entity, of the capital of another entity, the acquisition of the net assets of another entity, the assumption of the liabilities of another entity or the acquisition of part of the net assets of another entity that, when combined, constitute one or more businesses. Business combination may also take place by

issuing equity instruments, transferring cash, cash equivalents or other assets, or a combination thereof. The transaction can take place among the owners of the combining entities or between an entity and the owners of another entity. It may also involve the setting up of a new entity that controls the combined entities or the net assets transferred or the restructuring of one or more combined entities.

The FS Italiane group recognises business combinations under common control, which are not covered by IFRS 3 or other standards, in accordance with IAS 8 in order to reliably and fairly present the transaction in accordance with OPI 1 (Assirevi's preliminary guidance on the IFRS).

Business combinations are accounted for using the acquisition method. The acquisition price shall be reflected on the carrying amount of the acquiree's assets and allocated based on the fair value of the assets and liabilities, instead of their carrying amount. Any residual difference constitutes goodwill, if positive, or badwill, if negative.

Financial instruments

i. Classification and measurement of financial assets

The company's financial assets are classified and measured considering both the business model used to manage such assets and the characteristics of their cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling financial assets or both. The company performs SPPI (Solely Payment of Principal and Interest) tests on each instrument to determine whether these contractual cash flows are solely payments of principal and interest (in which case the SPPI test is passed).

Financial assets are classified in one of the following categories at initial recognition:

- at amortised cost (AC)
- at fair value through other comprehensive income (FVOCI)
- at fair value through profit or loss (FVTPL)

(a) Financial assets measured at amortised cost

This category includes all financial assets that meet both of the following conditions:

- the financial asset is held solely to collect contractual cash flows (HTC - Held To Collect - business model); and
- the contractual cash flows are solely payments of principal and interest (SPPI test passed).

In this category, financial instruments are initially recognised at fair value, inclusive of transaction costs, and subsequently measured at amortised cost. Interest, calculated using the effective interest method, impairment losses (impairment gains), exchange gains (losses) and gains (losses) on derecognition are recognised in profit or loss.

(b) Financial assets at fair value through other comprehensive income (FVTOCI)

This category includes all financial assets that meet both of the following conditions:

- the asset is held to collect not only contractual cash flows but also the cash flows generated from its sale (HTC&S model); and

- the contractual cash flows are solely payments of principal and interest (SPPI test passed).

In this category, the financial assets are initially measured at fair value, inclusive of transaction costs. Interest (calculated using the effective interest method), impairment losses (impairment gains), exchange gains (losses) and gains (losses) on derecognition are recognised in profit or loss. Other fair value gains or losses are recognised in OCI. Upon derecognition, all cumulative gains or losses previously recognised in OCI will be reclassified to profit or loss.

For information about equity instruments which fall under the scope of IFRS 9, reference should be made to the paragraph on Investments in subsidiaries, associates, joint arrangements and other investments.

(c) Financial assets at fair value through profit or loss (FVTPL)

This category includes all financial assets not classified as measured at amortised cost or fair value through other comprehensive income.

Financial instruments classified under this category are initially and subsequently measured at fair value. Transaction costs and fair value gains and losses are recognised in profit or loss.

ii. Classification and measurement of financial liabilities

Loans and borrowings, trade payables and other financial liabilities are initially recognised at fair value, net of directly-attributable costs, and are subsequently measured at amortised cost, applying the effective interest method. When there is a change in the estimated expected cash flows, the carrying amount of the liabilities is recalculated to reflect this change on the basis of the present value of the new expected cash flows and of the effective internal rate as initially determined. Loans and borrowings, trade payables and other financial liabilities are classified under current liabilities, except for those with a contractual term of more than twelve months after the reporting date and those for which the company has an unconditional right to defer their settlement for at least twelve months after the reporting date. Loans and borrowings, trade payables and other financial liabilities are derecognised when repaid and when the company has transferred all risks and charges related to the instrument.

iii. Classification and measurement of derivatives

The company has opted to continue applying hedge accounting to derivatives, as permitted by IAS 39 until the IASB completes the macro-hedging project to simplify the accounting treatment of hedges.

The company uses derivatives as part of its hedging strategies to mitigate the risk of fair value gains or losses on recognised assets or liabilities or firm commitments (fair value hedges) or changes in cash flows expected from firm commitments or highly probable transactions (cash flow hedges). The effectiveness of hedges is documented and tested since the inception of the transaction which is periodically (at least at each annual or interim reporting date) measured by comparing the fair value gains or losses on the hedge to those on the hedged item (dollar offset ratio) or, with respect to more complex financial instruments, through statistical analyses based on risk changes.

Fair value hedges: fair value gains or losses on derivatives designated as fair value hedges and which qualify as such are recognised in profit or loss, similarly to fair value gains or losses on hedged assets or liabilities attributable to the hedged risk.

Cash flow hedges: fair value gains or losses on derivatives designated as cash flow hedges and which qualify as such are recognised, only to the extent of the “effective” portion, in other comprehensive income in the hedging reserve. They are subsequently reclassified to profit or loss when the underlying hedged item affects profit or loss. Fair value gains or losses related to the ineffective portion are immediately recognised in profit or loss. Should the underlying transaction no longer be considered highly probable, the related portion of the hedging reserve is immediately reclassified to profit or loss. Conversely, should the derivative be sold, expire or no longer qualify as an effective hedge of the risk for which the transaction was created, the related portion of the hedging reserve is maintained until the underlying item affects profit or loss. Recognition of the hedge as a cash flow hedge is discontinued prospectively.

iv. Subsequent measurement: impairment losses

The company applies the expected credit loss (ECL) model to determine impairment losses, which entails a significant assessment level of the impact of the changes in economic factors on the ECL, which are probability-weighted.

Loss allowances are measured using the general deterioration method and the simplified approach. Specifically:

- under the general deterioration method, the financial instruments are to be classified in three stages which reflect the level of deterioration from the moment the financial instrument is acquired and provide for a different ECL calculation method;
- under the simplified approach, some simplifications may be applied to trade receivables, contract assets and lease assets so that the entities are not required to monitor credit risk changes, as required instead by the general approach. Under the simplified approach, lifetime expected credit losses are recognised, therefore, no stage allocation is necessary. Losses are calculated over the residual life of the asset or receivable, which does not generally exceed 12 months.

As mentioned earlier, when the general deterioration method applies, financial instruments are classified into three stages based on the deterioration of credit quality between initial recognition and the measurement date:

- *Stage 1:* includes all financial assets under assessment on the date of initial recognition regardless of qualitative indicators (e.g., ratings) and except for situations with objective evidence of impairment. Upon subsequent measurement, all financial instruments whose credit risk has not increased significantly since the date of initial recognition or whose credit risk at the reporting date is low, remain in Stage 1. For these exposures, 12-month ECL are provided for that represent the ECL that result from default events that are possible within the 12 months after the reporting date. Interest on Stage 1 financial instruments is calculated on the gross carrying amount (without deducting the loss allowance);
- *Stage 2:* includes the financial instruments whose credit risk has increased significantly since the date of initial recognition, which, however, do not show objective evidence of impairment. For these assets, only lifetime ECL are provided for, i.e., ECL that result from all possible default events over the expected life of a financial

instrument. Interest on Stage 2 financial instruments is calculated on the gross carrying amount (without deducting the loss allowance);

- *Stage 3*: includes financial assets with objective evidence of impairment at the reporting date. For these assets, only lifetime ECL are provided for, i.e., ECL that result from all possible default events over the expected life of a financial instrument.

In order to identify the methodological approach to be applied to the assets that are in scope of the impairment requirements and, specifically, the correct probability of default, the company defined a conventional cluster segmentation based on counterparty:

- Public administration: all loans and receivables with the government, regions, provinces, municipalities, the EU or related bodies;
- Intragroup: all loans and receivables with the parent, subsidiaries and associates;
- Deposits: all deposits with banks;
- Amounts from third parties: loans and receivables other than those above, with non-financial companies, producers and consumers.

Furthermore, the company opted to apply the low credit risk exemption allowed by IFRS 9 to assets other than trade receivables that are rated investment grade (between AAA and BBB-). Accordingly, there is no stage allocation: in fact these assets are directly allocated to Stage 1 with a one-year provision.

Therefore, the application of the impairment model entails the following steps:

- Separation between loans and trade receivables: this distinction isolates the scope of the assets subject to the stage allocation criteria, i.e., all loans. Conversely, these criteria do not apply to trade receivables following the application of the simplified approach whereby expected credit losses are always classified on a lifetime basis.
- Calculation of expected credit losses - loans: the expected credit loss is calculated for each cluster, once the relevant stage has been identified;
- Calculation of expected credit losses - trade receivables: for each cluster, trade receivables are broken down by due date (specifically, falling due, past due up to one year, past due up to two years, past due by more than two years). The expected credit losses are then calculated accordingly.

Fair value estimates

The fair value of instruments quoted on an active market is calculated based on the bid price at the reporting date, while that of instruments not quoted on an active market is determined using financial valuation techniques: specifically, the fair value of interest rate swaps is measured by discounting expected cash flows, while that of currency forwards considers closing rates and the expected differentials of the relevant currencies. Financial assets and financial liabilities measured at fair value are classified using the following three levels of the fair value hierarchy, based on the relevance of the inputs used to determine fair value. Specifically:

- Level 1: financial assets and financial liabilities whose fair value is calculated based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the company can access at the measurement date;
- Level 2: financial assets and financial liabilities whose fair value is calculated based on inputs other than quoted prices included within Level 1 that are observable directly or indirectly;

- Level 3: financial assets and financial liabilities whose fair value is calculated based on unobservable inputs.

The company's portfolio includes over-the-counter (OTC) instruments measured at Level 2. Financial instruments have been measured at fair value using financial models based on market standards. Specifically, this entailed:

- determining the net present value of future flows for interest rate swaps;
- using market value calculation models for collars.

The inputs used to feed the above models reflect observable market parameters which are available with the main financial info providers.

Specifically, the swap vs. three-month Euribor curve figures were used, as well as those related to the swap vs. six-month Euribor curve, the Eur interest rate volatility curve and the credit default swap curve (CDS) of the parties to the derivative contract, which reflect the input widely accepted by market operators to calculate non-performance risk. This risk is calculated using adequate financial valuation techniques and models which include, inter alia, the following factors *i*) the risk exposure, being the potential mark-to-market exposure throughout the life of the financial instrument, *ii*) adequate CDS curves to reflect their probabilities of default (PD).

In accordance with IFRS 13, starting from the amount of the IRS and the option (for the collar) unadjusted by credit risk (FVMID), the related credit value adjustment and credit adjusted fair value have been calculated.

Inventories

Inventories are recognised at the lower of purchase and/or production cost and net realisable value. Cost is calculated using the weighted average cost method. The net realisable value of finished products and property is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The net realisable value of raw materials, consumables and supplies is replacement cost.

Purchase cost includes additional charges, while production cost comprises directly-attributable costs and a portion of indirect costs that are reasonably attributable to the products.

Obsolete and/or slow-moving inventories are written down to reflect their estimated possible use or future sale, through the recognition of a specific allowance for inventory write-down. The write-down is derecognised in subsequent years if the reasons therefor no longer apply.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and available bank deposits and any other forms of short-term investment, with an initial maturity of three months or less, net of impairment losses calculated in accordance with IFRS 9. At the reporting date, current account overdrafts are classified in the statement of financial position as loans and borrowings under current liabilities. Cash and cash equivalents are measured at fair value, which usually coincides with their nominal amount, through profit or loss.

Employee benefits

Short-term benefits

Short-term benefits comprise wages, salaries, related social security contributions, holidays paid and incentives paid out in the form of bonuses payable in the twelve months after the reporting date during the which the employees provide their service. These benefits are accounted for as personnel expense components in the period in which the employees provide their service .

Other post-employment benefits (TFR and Free Travel Card)

The company has both defined benefit and defined contribution plans in place. The defined contribution plans are managed by third-party fund managers, in relation to which there are no legal or any other obligations to pay additional contributions if the fund does not have sufficient assets to meet the commitments with employees. With respect to the defined contribution plans, the company pays contributions, either voluntarily or as required by contract, into public and private insurance pension funds. Contributions are recognised as personnel expense on an accruals basis. Advance payments for contributions are recognised as an asset that will be repaid or offset against future payments, if due. For these plans, the actuarial and the investment risks are borne by employees.

A defined benefit plan is a plan that cannot be classified as a defined contribution plan. Under defined benefit plans, the amount of the benefit to be paid to the employee can be quantified only after the termination of the employment relationship, and is linked to one or more factors, such as age, years of service and remuneration. Therefore, defined benefit obligations are determined by an independent actuary using the projected unit credit method. The present value of defined benefit plans is determined by discounting future cash flows at an interest rate equal to that of (high-quality corporate) bonds issued in the foreign currency in which the liability will be settled and that takes account of the term of the related pension plan. Actuarial gains and losses are fully recognised in profit or loss in the relevant year.

Specifically, the company manages a defined benefit plan that consists of post-employment benefits (Italian "TFR"). Italian companies are required to accrue a provision pursuant to article 2120 of the Italian Civil Code, which is treated as deferred remuneration and is based on employees' duration of service and the remuneration they receive during that time. Starting from 1 January 2007, Law no. 296 of 27 December 2006, the "2007 Finance Act" and subsequent amendments and additions, introduced significant amendments to TFR regulations, including the employees' right to choose to transfer the TFR being accrued either to supplementary pension funds or to the "Treasury Fund" managed by INPS (the Italian Social Security Institute). Consequently, the obligation to INPS and the contributions paid into supplementary pension funds are now treated, pursuant to IAS 19 Employee benefits, as defined contribution plans, while the amounts recognised under post-employment benefits at 1 January 2007 are still treated as defined benefit plans.

The company also has a defined benefit pension plan in place, the "Free Travel Card" (Carta di Libera Circolazione, CLC) that gives current and retired employees and their relatives, the right to use – free of charge or, in some cases, for an admission fee – the trains managed by Ferrovie dello Stato Italiane group.

Consequently, in accordance with the above-mentioned actuarial techniques, a provision is recognised which reflects the discounted charge for retired employees entitled to benefits, and the benefits accrued for employees in force to be disbursed at the end of the employment.

The Free Travel Card benefits and the effects arising from actuarial valuations are the same as those of post-employment benefits.

Provisions for risks and charges

Provisions for risks and charges are recognised to cover specific liabilities that are certain or probable, but whose amount and/or due date is unknown at the reporting date. A provision is recognised when there is a present obligation (legal or constructive), as a result of a past event, and it is probable that an outflow of resources will be required to settle the obligation. The provisions are stated as the best estimate of the expenditure required to settle the obligation. The discount rate used to determine the present value of the liability reflects current market values and considers the risk specific to each liability.

Where the effect of the time value of money is material and the settlement dates of obligations can be estimated reliably, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation. The discount rate reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as interest expense.

Risks for which a liability is only possible are disclosed in the specific section on contingent liabilities without accruing any provisions.

Revenue from contracts with customers

i. Initial recognition and subsequent measurement

The company recognises revenue in order to depict the transfer of the promised goods and/or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. Revenue is recognised using the five step model, which entails: i) identifying the contract with the customer, ii) identifying the performance obligations in the contract, iii) determine the transaction price, iv) allocate the transaction price to the performance obligations in the contract and v) recognising revenue.

Revenue is measured considering the contract terms and the commercial practices usually applied to transactions with customers. The transaction price is the amount of consideration (which may include fixed amounts, variable amounts, or both) to which the company expects to be entitled in exchange for transferring promised goods or services to a customer. Control refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset (good/service). The total consideration of contracts for the provision of services is allocated among all services based on the selling prices of the related services as if they had been sold separately. For each contract, the reference element for the recognition of revenue is the single performance obligation. For each performance obligation, the company recognises revenue when (or as) it satisfies a performance obligation by transferring a promised good or service (i.e., an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset. For performance obligations satisfied over time, revenue is recognised over time, assessing the progress towards complete satisfaction of the performance obligation at each reporting date. The company measures progress in accordance with an input method (cost-to-cost method). Accordingly, revenue is recognised based on the inputs used to satisfy the obligation up to the

reporting date, compared to the total inputs assumed to satisfy the entire obligation. When the inputs are distributed consistently over time, the company recognises the corresponding revenue on a straight-line basis. In some circumstances, when the company is unable to reasonably measure the outcome of a performance obligation, revenue is recognised only to the extent of the costs incurred. The nature and timing of performance obligations and the significant terms for the satisfaction of performance obligations are summarised below for the company's main contracts with customers.

The nature and timing of performance obligations and the significant terms for the satisfaction of performance obligations are summarised below for the company's main contracts with customers:

Products and services	IFRS 15 recognition Nature and terms of performance obligations, significant terms of payment
Sale of goods and services and construction contracts (standard)	<p>Under IFRS 15, revenue is measured considering the contract terms and the commercial practices usually applied to transactions with customers. The transaction price is the amount of consideration (which may include fixed amounts, variable amounts, or both) to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer. Control refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset (good/service). The total consideration of contracts for the provision of services is allocated among all services based on the selling prices of the related services as if they had been sold separately.</p> <p>Under IFRS 15, for each contract, the reference element for the recognition of revenue is the single performance obligation. For each separately-identified performance obligation, an entity shall recognise revenue when (or as) the entity satisfies a performance obligation by transferring a promised good or service (i.e., an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset.</p> <p>For performance obligations satisfied over time, revenue is recognised over time, assessing the progress towards complete satisfaction of the performance obligation at each reporting date. The group measures progress in accordance with an input method (cost-to-cost method). Accordingly, revenue is recognised based on the inputs used to satisfy the obligation up to the reporting date, compared to the total inputs assumed to satisfy the entire obligation. When the inputs are distributed consistently over time, the group recognises the corresponding revenue on a straight-line basis. In some circumstances, when the group is unable to reasonably measure the outcome of a performance obligation, revenue is recognised only to the extent of the costs incurred.</p>
Fees	<p>It is the amount paid to use the train paths necessary to carry out the long and short haul domestic passenger rail transport and for freight transport (chapter 5 of the network prospectus (PIR)) which reflect the individual performance obligations (POs).</p> <p>The fee is calculated as the sum of components A and B (chapter 6 of the PIR):</p> <ul style="list-style-type: none"> - component A relates to the wear and tear of the infrastructure; - component B relates to the market segments' ability to pay. <p>Revenue is calculated every month with progress bills based on the contractually-</p>

	<p>agreed amounts.</p> <p>Adjustment takes place every quarter based on the actual number of trains in operation. This figure is calculated for each train by pricing the train paths under the contract and those actually used by each railway company.</p>
Ferry services	<p>This service relates to the transport of trains by ferry and is part of the minimum access package ("MAP").</p> <p>Although it also comprises shunting, boarding and disembarking services, this service is considered a single performance obligation.</p> <p>The tariff is governed by chapter 6 of the PIR and is calculated by multiplying the market segments' ability to pay by the km travelled.</p> <p>Revenue is recognised and progress bills are issued.</p> <p>Adjustment takes place every quarter based on the actual number of trains transported.</p>
Electric traction (traffic-related services)	<p>Chapter 5 of the PIR includes the supply of electrical energy for traction under additional services.</p> <p>The fee for this service is calculated in accordance with the MEF decree dated 22 December 2015 and set out in chapter 6 of the PIR. It is equal to the sum of the fee for the indirect supply costs and the unit cost of energy, multiplied by electric km.</p> <p>Revenue is recognised every month based on progress billing with quarterly adjustments. The actual cost of electrical energy for traction is calculated within the following year and the billed cost is adjusted with the railway companies.</p>
Other traffic-related services (excluding electric traction)	<p>This contract refers to the traffic-related services covered by Chapter 5 of the PIR (e.g., stopping, water supply, washing sidings, pre-heating, shunting services, fast track, parking, etc.), excluding those covered by the MAP and electric traction.</p> <p>The tariffs for each service are listed in chapter 6 of the PIR.</p> <p>Each traffic-related service is considered an individual performance obligation. Consequently, each fee refers to a single PO.</p> <p>Revenue is recognised monthly, while invoices are issued every three months based on the amounts calculated for each railway company and each service.</p>
Health services	<p>The group's Health department offers many different health services to FS Italiane group companies and companies, transport public bodies and accredited private bodies and private parties. These services include fitness assessments for various types of driving licences, checking the mental and physical soundness of transport workers, specialist check-ups, etc..</p> <p>Once the service has been provided and completed, it is entered into the WEB VINE system which will transfer the relevant data necessary for revenue recognition and to issue the related invoice.</p>
Revenue from GSMR	<p>This contract governs the service that RFI provides to telephone operators, granting non-exclusive access to the GSM frequency band inside railway tunnels, and the maintenance of the related systems. The consideration paid by the above operators is invoiced in accordance with the terms and conditions of the relevant contract.</p>
Processing for third parties	<p>This usually covers long-term contracts for the execution of a work or a group of closely interrelated works. These are contract works performed in accordance with the customer's technical specifications and are not carried out for the</p>

	protection or safety of the railway operations. This category also includes the services generally related to the construction of an asset, agreed as a single item as per the customer's specific instructions. When the agreement is signed with the customer, an "Internal contract" is created which comprises the figures related to the works necessary for revenue recognition purposes. Invoices are issued after reporting, unless in the case of contract advances.
Sale of materials	These contracts cover the sale of "new" materials (mainly technological materials) and "serviceable" materials (mainly superstructure materials). New materials are sold at the more favourable price between the standard and the purchase price, while the sale price of serviceable second-hand materials is usually based on the price of new materials, reduced by a percentage discount to reflect certain variables (e.g., consumption, type, exclusion of transport, etc.). For each delivery of materials, the Site Manager prepares a delivery report, a copy of which is sent to the person in charge of issuing the sale order and the related invoice.

ii. Variable consideration

If the consideration promised in a contract includes a variable amount (e.g., because of discounts, rebates, refunds, credits, price concessions, incentives, performance bonuses, penalties or because the consideration is contingent on the occurrence or non-occurrence of a future event), an entity shall estimate the amount of consideration to which it is entitled. The company estimates variable considerations consistently for similar items, using the expected value or the most likely amount method. They subsequently include in the transaction price the amount of variable consideration estimated, only to the extent that it is highly probable.

iii. Existence of a significant financing component

When a significant financing component exists, revenue is adjusted, both when companies are financed by their customer (advance collection) and when they finance it (deferred collection). The existence of a significant financing component is identified when the contract is signed by comparing expected revenue against the payments to be received. It is not recognised if the period between when the entity transfers a promised good or service and when the customer pays for that good or service is one year or less.

iv. Incremental costs of obtaining a contract and costs to fulfil a contract

The incremental costs of obtaining a contract are those costs that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (for example, a sales commission), which it expects to recover. Conversely, if no contract is obtained, they are recognised provided that they are explicitly chargeable to the customer. The company recognises the costs incurred to fulfil a contract only when they relate directly to a contract, generate or enhance resources that will be used in satisfying performance obligations in the future and are expected to be recovered.

Government grants

Government grants, when formally assigned and, in any case, when the right to their disbursement is deemed definitive as it is reasonably certain that the company will comply with any conditions attached to the grant and that the grants will be received, are recognised on an accruals basis.

Grants related to assets

They refer to amounts paid by the government and other public authorities to the company for the implementation of initiatives aimed at the construction, reconditioning and expansion of property, plant and equipment. They are recognised as a direct reduction in the cost of the assets to which they refer and decrease the depreciation rates.

Grants related to income

They refer to amounts paid by the government or other public authorities to the company to offset costs and charges incurred. They are recognised under Revenue from sales and services, as a positive component of income.

Dividends

They are recognised in profit or loss when the shareholder's right to receive payment arises, which usually coincides with the shareholder's resolution approving dividend distribution.

Dividends distributed to the company's shareholder are presented as a change in equity and recognised under liabilities when their distribution is approved by the shareholder.

Cost recognition

Costs are recognised when they relate to goods and services acquired or consumed in the year or by systematic allocation.

Income taxes

Current taxes are calculated based on estimated taxable profit and in accordance with ruling tax legislation. Deferred tax assets, related to carry forward tax losses, are recognised when it is probable that future taxable profit will be available against which these losses can be recovered. Deferred tax assets and liabilities are calculated using the tax rates that are expected to be applied in the years in which the differences will be realised or settled.

Current taxes, deferred tax assets and liabilities are recognised in profit or loss, except for those relating to items recognised under other comprehensive income and directly taken to equity. In the latter cases, deferred tax liabilities are recognised under the "Tax effect" caption under other comprehensive income or directly in equity, respectively. Deferred tax assets and liabilities are offset when they are levied by the same tax authorities, there is a legally enforceable right to set off the recognised amounts and settlement on a net basis is expected.

Taxes other than income taxes, such as indirect taxes and duties, are included in profit or loss under Other operating costs.

When the conditions set out by IAS 12 are not met, no current or deferred taxes are recognised.

Translation of foreign currency amounts

Any transactions in a currency other than the company's functional currency are recognised at the exchange rate prevailing at the date of the transaction. Monetary assets and liabilities denominated in a currency other than the Euro are subsequently adjusted at the closing rate. Non-monetary assets and liabilities denominated in a currency other than the Euro are recognised at historical cost using the exchange rate prevailing at the date of initial recognition. Exchange differences are taken to profit or loss.

Assets held for sale and disposal groups

Non-current assets and liabilities (or disposal groups) whose carrying amount will be recovered principally through a sale transaction rather than through continuing use are classified as held for sale and recognised separately from any other assets and liabilities in the statement of financial position. The corresponding prior year statement of financial position figures are not reclassified. A discontinued operation is a component of the company that either has been disposed of or is classified as held for sale, and:

- represents a separate major line of business or geographical area of operations;
- is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations or;
- is a subsidiary acquired exclusively with a view to resale.

Profits or losses of discontinued operations – either disposed of or classified as held for sale and being divested – are recognised separately in profit or loss, net of tax effects. Prior year corresponding figures, where present, are reclassified and presented separately in the separate income statement, net of tax effects, for comparative purposes. Non-current assets and liabilities (or disposal groups) classified as held for sale, are firstly recognised in accordance with the specific standard applicable to each asset and liability and, subsequently, are recognised at the lower of carrying amount and fair value, less costs to sell. Subsequent impairment losses are recognised directly as an adjustment to non-current assets (or disposal groups) classified as held for sale through profit or loss.

Impairment losses are reversed for any subsequent increase in fair value less costs to sell of an asset, and may not exceed the cumulative impairment loss that has been previously recognised.

New standards

First-time adoption of standards, amendments and interpretations

The following new standards are effective for annual periods beginning on or after 1 January 2019.

IFRS 16 Leases

On 13 January 2016, the IASB issued IFRS 16 Leases which was endorsed by the EU with Regulation no. 1986 of 31 October 2017. This standard replaces IAS 17 Leases, IFRIC 4 Determining whether an arrangement contains a lease, SIC 15 Operating leases - Incentives and SIC 27 Evaluating the substance of transactions in the legal form of a lease. It introduces a new definition of a lease and the concept of control to distinguish leases from service contracts. Specifically, in order to determine whether a contract is a lease, IFRS 16 requires the reporting entity to check whether the lessee has the right to control the use of an identified asset for a specific period of time.

This standard is applicable to annual periods beginning on or after 1 January 2019 and introduces a single lessee accounting model that requires a lessee recognise a right-of-use asset and a lease liability (i.e., the obligation to make lease payments). The changes in the financial statements of the lessor as a result of this standard are not particularly significant. The FS Italiane group companies have completed the preliminary assessment of the potential impacts of applying IFRS 16 at the transition date (1 January 2019). This assessment consisted of various stages, including mapping contracts that could potentially contain a lease and analysing such contracts to understand the main clauses that are relevant for the purposes of IFRS 16. Reference should be made to that described earlier for a detailed description of the impacts of this new standard and to that indicated further on for information on the impacts of initial application.

Annual improvements to IFRS: 2015-2017 cycle

On 12 December 2017, the IASB issued the Annual improvements to IFRS Standards 2015-2017 Cycle. The amendments are part of the normal rationalisation and clarification of the IFRS and cover: IAS 12 Income taxes, IAS 23 Borrowing costs, IFRS 3 Business combinations, IFRS 11 Joint arrangements, IAS 19 Employee benefits and IAS 28 Investments in associates and joint ventures. The application of this amendment, where applicable and because of its nature, did not have any significant impacts on the financial statements.

Amendments to IAS 19 Plan amendment, curtailment or settlement

On 7 February 2018, the IASB issued the amendments to IAS 19 Employee benefits. The amendments clarify the accounting treatments for defined benefit plans when a plan amendment, curtailment or settlement occurs. Accordingly, an entity shall use the updated assumptions to determine current service cost and net interest for the remainder of the period after a plan amendment, curtailment or settlement. The application of this amendment, where applicable and because of its nature, did not have any significant impacts on the financial statements.

Amendments to IAS 28 Long-term interests in associates and joint ventures

On 12 October 2017, the IASB issued the amendment to IAS 28 Investment entities. The amendment clarifies that IFRS 9 applies to non-current amounts due from an associate or a joint venture that form part of the net investment in the associate or joint venture. Furthermore, under the amendments, IFRS 9 also applies to said amounts prior to the adoption of IAS 28, so that the entity does not consider any adjustments to the long-term interests arising from the application of this standard. The application of this amendment, where applicable and because of its nature, did not have any significant impacts on the financial statements.

IFRIC 23 Uncertainty over income tax treatments

On 7 June 2017, the IASB issued IFRIC 23 Uncertainty over income tax treatments. The interpretation clarifies the accounting for uncertain deferred or current taxes, related to interpretation issues not clarified by the relevant tax authorities. The application of this interpretation, where applicable and because of its nature, did not have any significant impacts on the financial statements.

Amendments to IFRS 9 Prepayment features with negative compensation

On 12 October 2017, the IASB issued the amendment to IFRS 9 Financial instruments - Prepayment features with negative compensation, which was endorsed by the EU with Regulation no. 498 of 22 March 2018. The

amendments clarify the accounting of particular prepayable financial assets when IFRS 9 applies. Specifically, the amendment proposes measuring such financial assets, which may result in negative compensation, at amortised cost or at fair value through other comprehensive income, depending on a company's model. The application of this amendment, where applicable and because of its nature, did not have any significant impacts on the financial statements.

Standards, amendments and interpretations endorsed by the European Union, but not yet adopted

Amendments to references to the conceptual framework in IFRS standards

On 29 March 2018, the IASB issued the revised version of the Conceptual framework for financial reporting. The main changes compared to the 2010 version include: a new chapter on measurement, improved definitions and guidance, specifically with respect to the definition of liability, clarifications of major concepts, such as stewardship, prudence and measurement uncertainties. The EU endorsed this amendment on 29 November 2019.

Amendments to IAS 1 and IAS 8 – Definition of material

On 31 October 2018, the IASB issued an amendment to IAS 1 and IAS 8 Definition of material. The main changes relate to the alignment of the references and quotes included in some standards in order to reflect the new version of the Conceptual Framework, which was approved in March 2018, instead of the 2010 version. The amendment applies to annual periods beginning on or after 1 January 2020. The EU endorsed this amendment on 29 November 2019.

Standards, amendments and interpretations not yet endorsed by the European Union

Amendments to IFRS 3 Business Combinations

On 22 October 2018, the IASB issued an amendment to IFRS 3 Business combination. The amendment relates to the definition of business which, at present, is an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing goods or services to customers, generating investment income (such as dividends or interest) or generating other income from ordinary activities. Previously, it was an integrated set of activities and assets that was capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs or other economic benefits directly to investors or other owners, members or participants. The amended definition of business will apply to acquisitions that occur on or after 1 January 2020. The EU is expected to endorse this amendment in 2020.

Amendments to IFRS 9, IAS 39 and IFRS 7

The IASB published Interest Rate Benchmark Reform (Amendments to IFRS 9, IAS 39 and IFRS 7), which amends the hedge accounting requirements under IFRS 9 and IAS 39.

The amendments will come into effect from 1 January 2020 but companies may choose to apply them earlier.

USE OF ESTIMATES AND JUDGEMENTS

In preparing the financial statements in accordance with IFRS, the directors applied accounting standards and methods, which in some circumstances rely on difficult and subjective estimates and judgements based on past experience and on assumptions that are considered to be reasonable and realistic over time depending on the

circumstances. Therefore, the actual amounts of certain financial statements captions calculated according to the above estimates and assumptions may differ in the future, even materially, from those reported in the financial statements, because of the uncertainty that characterises the assumptions and conditions on which the estimates are based. Estimates and assumptions are reviewed periodically and the effects of any changes are recognised in profit or loss when they affect the year only. If the revision affects both current and future years, the change is recognised in the year the revision is made and in the related future years.

Therefore, actual results may differ, even materially, from these estimates following possible changes in the factors considered in the determination of these estimates.

The following accounting standards require the most subjectivity from the directors in the preparation of estimates and would have a material impact on the financial figures if there were a change in the conditions underlying the assumptions used.

Impairment losses

Property, plant and equipment and intangible assets with a finite life are tested for impairment. Impairment losses are recognised when there is evidence that it will be difficult to recover the related carrying amount through the use of the asset. Impairment tests require the directors to make subjective valuations based on the information available within the company and in the market, as well as from past experience. Furthermore, when a potential impairment loss exists, the company calculates such loss using suitable valuation techniques. The correct identification of impairment indicators and the estimates for calculating them depend on factors that may vary over time, thus affecting valuations and estimates made by the directors.

Impairment losses

According to the company's impairment model, an expected loss is the sum of the expected losses that result from possible default events on a financial instrument over a specific time horizon; this results in the recognition of a loss using both past and present figures and forward-looking information. Determining expected credit losses, especially when there are credit-impaired financial assets or which show objective evidence of impairment requires the directors to make subjective valuations based on the information available within the company (e.g., estimating expected cash flows) and in the market, as well as from past experience. The correct identification of impairment indicators and the estimates for calculating them depend on factors that may vary over time, thus affecting valuations and estimates made by the directors.

Extension/termination options in leases

For leases that include extension/termination options, at the commencement date of the lease, the company assesses whether it is reasonably certain to exercise the options and reassesses them whenever a significant event or significant change in circumstances under its control occurs. Assessing the extension option may require the directors to make subjective judgements based on the information available at the lease measurement date and on past experience.

Residual value of property, plant and equipment, investment property and intangible assets with a finite useful life

Under IAS 16, 38 and 40, the depreciable cost of an item of property, plant and equipment, investment property and intangible assets with a finite useful life is calculated by subtracting its residual value. The residual value of the infrastructure and investment property is calculated as the estimated amount that an entity would currently obtain from disposal of an asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of the Concession. The company periodically revises the residual value and measures its recoverability using the best information available at that date. Periodic updates may cause a change in the depreciation rate for future years.

Amortisation and depreciation

The cost of property, plant and equipment and investment property and of intangible assets with a finite useful life is depreciated/amortised based on production volumes, as described in detail in the note to property, plant and equipment. The company assesses any technological, usage and sector changes to update these volumes on a regular basis. These updates may entail a change in the amortisation and depreciation period and in the amortisation and depreciation rates of future years.

Calculating the amortisation/depreciation of these assets entails a complex accounting estimate that is influenced by a number of factors, including the estimated production volumes expressed as train-km, the estimated residual value and any changes to the regulatory framework.

Provisions for risks and charges

Provisions are accrued against legal and tax risks which represent the risk of a negative outcome. The recognised provisions relating to these risks reflect the best estimate made by the directors at the reporting date. This estimate entails the adoption of assumptions that depend on factors which may vary over time and which may have significant effects compared to the current estimates made by the directors for the preparation of the company's financial statements.

Fair value of derivatives

The fair value of derivatives that are not quoted on active markets is measured using valuation techniques. The company applies valuation techniques that use inputs that can be observed in the market, either directly or indirectly, at the reporting date, and that are connected to the assets and liabilities being measured. Even if the estimates of the above fair values are considered reasonable, any possible changes in the estimate factors on which the calculation of the aforesaid amounts is based may generate different valuations.

Operating segments

At the date of these financial statements, the company had no debt instruments or shares quoted on a regulated market and was included in the scope of consolidation of the FS Italiane group, which provides information on its operating segments in the notes to the consolidated financial statements, in accordance with IFRS 8.2 b.

4. Effects of initial application of IFRS 16

The effects of the initial application of IFRS 16, when the company acts as the lessee as well as the lessor, are described below:

Lessor

The standard does not require the company to make any adjustments on transition for leases in which it is a lessor. It therefore accounts for these leases applying IFRS 16 from the date of initial application.

Lessee

The company applied IFRS 16 Leases as from 1 January 2019 using the modified retrospective approach, whereby the cumulative effect of initial application is recognised in the opening balance of retained earnings.

At the date of initial application, the company opted to use the practical expedient offered by the standard in order to avoid reassessing whether each contract is, or contains, a lease at the date of initial application. Accordingly, the company only applied the new standard to leases that it had already identified as leases in accordance with IAS 17 Leases and IFRIC 4 Determining whether an arrangement contains a lease. The IFRS 16 definition of a lease was therefore only applied to contracts signed or amended on or after 1 January 2019.

Having excluded short-term leases and those for low-value assets as they were exempt, the company recognised right-of-use assets and lease liabilities for the leases it had previously classified as operating leases applying IAS 17.

- it measured lease liabilities at the present value of the residual lease payments, discounted using the lessee's incremental borrowing rate at 1 January 2019;
- it measured right-of-use assets at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised immediately before the date of initial application.

The company applied IFRS 16 to the leases previously classified as operating leases under IAS 17, using the following practical expedients:

- it applied a single discount rate to a portfolio of leases with reasonably similar characteristics;
- it assessed the recoverability of right-of-use assets at 1 January 2019 based on the measurement of onerous lease contracts in accordance with IAS 37.

With respect to leases classified as finance leases under IAS 17, the carrying amount of right-of-use assets and lease liabilities at 1 January 2019 coincides with the carrying amount of the leased asset and the lease liability under IAS 17, immediately before such date.

At initial application of IFRS 16, the company recognised right-of-use assets (classified as property, plant and equipment according to the nature of the underlying asset) and lease liabilities (classified as current and non-

current financial liabilities) of €52,884. When measuring lease liabilities, it discounted lease payments using the incremental borrowing rate at 1 January 2019.

The average of the rates applied, based on the term of the financial liability, is shown in the table below.

1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y
0.05%	0.36%	0.80%	1.02%	1.31%	1.47%	1.70%	1.79%	1.91%	2.11%

The table below shows the impact of the adoption of the standard on the company's financial position at the transition date:

	(€'000)
	Impacts at 1 January 2019
ASSETS	
Land, buildings, railway and port infrastructure	36,349
Other assets	16,772
TOTAL ASSETS	53,121
LIABILITIES	
Lease liabilities (non-current)	41,141
Lease liabilities (current)	11,980
TOTAL LIABILITIES	53,121

The table below shows the impacts of the standard on profit or loss for 2019:

	(€'000)
	Impacts
Reversal of lease payments	13,170
Depreciation of right-of-use assets	(12,588)
Impact on operating profit	582
Increase in interest expense	(856)
Total impacts	(274)

The table below reconciles commitments at 31 December 2018 recognised in accordance with IAS 17/IFRIC 4 and lease liabilities at 1 January 2019 recognised in accordance with IFRS 16:

	(€'000)
	Impacts
Lease commitments at 31 December 2018 (unrecognised)	88,614
Discounting of 2018 commitments	(2,868)
Discounted lease commitments at 31 December 2018	85,746
Unrecognised lease liabilities under IFRS 16 exemptions	(32,625)
Total lease liabilities at 1 January 2019	53,121

The standard introduces new qualitative and quantitative disclosure requirements in order to provide financial statements users with sufficient information to understand and assess the effect of leases on the company's financial position, financial performance and cash flows.

NOTES TO THE STATEMENT OF FINANCIAL POSITION**5. Financial risk management**

The activities that the company carries out expose it to various types of risks that include market risk (interest rate and currency risk), liquidity risk and credit risk.

This section provides information on the company's exposure to each of the risks listed above, the objectives, policies and processes for the management of these risks and the methods used to assess them, as well as capital management. These financial statements also include additional quantitative information. The company's risk management focuses on the volatility of financial markets and is aimed at minimising potential undesired effects on its financial position and results of operations.

Credit risk

Credit risk is the risk that a customer or one of the counterparties of a financial instrument may cause a financial loss by not complying with an obligation. It mainly arises from trade receivables, loans with the public administration, derivatives and the company's cash and cash equivalents.

With respect to the derivatives used for hedging purposes and which can potentially generate credit exposure to counterparties, the company applies a specific policy that defines concentration thresholds by counterparty and credit rating.

The table below shows the company's exposure to the credit risk:

	(€'000)	
	31.12.2019	
	31.12.2018	
Non-current financial assets (including derivatives)	575,918	1,164,949
Loss allowance	(523)	(998)
Non-current financial assets (including derivatives), net of the loss allowance	575,395	1,163,951
Non-current trade receivables	1,679	1,693
Loss allowance	(2)	(3)
Current trade receivables, net of the loss allowance	1,677	1,690
Other non-current assets	4,040,517	3,441,985
Loss allowance	(2,946)	(2,692)
Other non-current assets, net of the loss allowance	4,037,571	3,439,293
Current trade receivables	827,626	832,782
Loss allowance	(150,770)	(148,758)
Current trade receivables, net of the loss allowance	676,856	684,024
Current financial assets (including derivatives)	689,830	673,621
Loss allowance	(497)	(515)
Current financial assets (including derivatives), net of the loss allowance	689,333	673,106
Cash and cash equivalents	540,272	720,119
Loss allowance	(389)	(544)
Cash and cash equivalents, net of the loss allowance	539,883	719,575
Other current assets	2,142,623	2,873,112
Loss allowance	(39,180)	(40,622)
Other current assets, net of the loss allowance	2,103,443	2,832,490
Total exposure, net of the loss allowance (*)	8,624,158	9,514,129

(*) Tax assets, equity investments, cash in hand and prepayments and accrued income are not included

A significant portion of trade receivables and loans relates to government and public authorities, such as the MEF and the regions.

The table below shows the exposure to credit risks by counterparty, excluding cash and cash equivalents, in absolute terms and as a percentage:

	(€'000)	
	31.12.2019	31.12.2018
Public administration, Italian government and regions	6,964,452	7,607,196
Ordinary customers	502,478	437,281
Financial institutions*	625,722	894,577
Other debtors	531,506	575,075
Total exposure, net of the loss allowance	8,624,158	9,514,129
* cash and cash equivalents net of cash in hand (€452 thousand)		
	31.12.2019	31.12.2018
Public administration, Italian government and regions	81%	80%
Ordinary customers	6%	5%
Financial institutions	7%	9%
Other debtors	6%	6%
Total exposure, net of the loss allowance	100%	100%

The amount of financial assets whose recoverability is uncertain is negligible. However, an adequate loss allowance was accrued in this respect.

The following tables give a breakdown of financial assets and trade receivables at 31 December 2019 and 2018 by past due brackets and related to the Public administration, the Italian government, the regions, ordinary customers and financial institutions.

(€'000)

31.12.2019						
Past due by						
	Not past due	0-180 days	180-360	360-720 days	More than 720days	Total
Public administration, Italian government and Regions (gross)	6,939,168	2,294	4,999	24,043	19,063	6,989,567
Loss allowance	(24,934)	(8)	(18)	(86)	(68)	(25,115)
Public administration, Italian government and Regions (net)	6,914,234	2,286	4,981	23,956	18,995	6,964,452
Group companies	502,086	12,030	8,367	4,702	17,583	544,769
Loss allowance	(12,222)	(293)	(204)	(115)	(428)	(13,263)
Group companies (net)	489,864	11,737	8,163	4,588	17,155	531,506
Third party customers (gross)	471,709	34,368	24,679	23,791	103,410	657,958
Loss allowance	(111,468)	(8,121)	(5,832)	(5,622)	(24,437)	(155,479)
Third party customers (net)	360,241	26,247	18,848	18,169	78,974	502,478
Financial institutions	626,172	-	-	-	-	626,172
Loss allowance	(450)	-	-	-	-	(450)
Financial institutions (net)	625,722	-	-	-	-	625,722
Total exposure, net of the loss allowance	8,390,060	40,270	31,991	46,713	115,124	8,624,158

(€'000)

31.12.2018						
Past due by						
	Not past due	0-180 days	180-360	360-720 days	More than 720days	Total
Public administration, Italian government and Regions (gross)	7,588,077	24,029	1,149	1,671	17,388	7,632,314
Loss allowance	(8,408)	(35)	(26)	(66)	(16,583)	(25,118)
Public administration, Italian government and Regions (net)	7,579,669	23,994	1,123	1,605	805	7,607,196
Group companies	524,273	38,726	2,719	2,806	19,639	588,163
Loss allowance	(401)	(30)	(2)	(2)	(12,653)	(13,088)
Group companies (net)	523,872	38,696	2,717	2,804	6,986	575,075
Third party customers (gross)	* 361,725	* 29,589	* 20,381	* 20,551	* 160,176	* 592,422
Loss allowance	(24,198)	(1,967)	(775)	(4,230)	(123,971)	(155,141)
Third party customers (net)	337,527	27,622	19,606	16,321	36,205	437,281
Financial institutions	895,256	-	-	-	107	895,363
Loss allowance	(679)	-	-	-	(107)	(786)
Financial institutions (net)	894,577	-	-	-	-	894,577
Total exposure, net of the loss allowance	9,335,645	90,312	23,446	20,730	43,996	9,514,129

Amounts from ordinary customers, past due by more than 720 days, mainly arise from sundry disputes. The legal actions commenced for the recovery of some amounts are still underway.

Sometimes, in order to recover the amounts, the offsetting of receivables and payables with the same customer/supplier was proposed and carried out.

Amounts receivable from the public administration, past due by more than 720 days, mainly refer to local bodies facing financial difficulties as part of the unfavourable national economic situation.

The total exposure and the impairment of each category was reclassified by risk class at 31 December 2019, as per Standard & Poor's rating, shown below:

(€'000)

2019
Amortised cost

	12-month expected credit losses	Lifetime - not impaired	Total
from AAA to BBB-	1,805,641	6,354,867	8,160,508
from B to CCC	378	657,579	657,957
Gross carrying amount	1,806,019	7,012,446	8,818,465
Loss allowance	(1,408)	(192,899)	(194,307)
Carrying amount	1,804,611	6,819,547	8,624,158

(€'000)

2018

Amortised cost			
	12-month expected credit losses	Lifetime - not impaired	Total
from AAA to BBB-	2,559,442	6,556,210	9,115,652
from BB to BB+	81	-	81
from B to CCC	107	592,422	592,529
Gross carrying amounts	2,559,630	7,148,632	9,708,262
Loss allowance	(2,057)	(192,076)	(194,133)
Carrying amount	2,557,573	6,956,556	9,514,129

The table below shows changes in impairment losses and gains on financial assets:

(€'000)

	12-month expected credit losses	Lifetime - not impaired	Total
Balance at 1 January 2019	(2,057)	(192,076)	(194,133)
Repaid financial assets	653	4,732	5,385
New financial assets acquired	(4)	(1,196)	(1,200)
Non-recurring transactions	0	0	0
Accrual to the loss allowance	0	(12,405)	(12,405)
Release of the allowance	0	6,181	6,181
Utilisation of the allowance	0	1,865	1,865
Balance at 31 December 2019	(1,408)	(192,899)	(194,307)

Liquidity risk

Liquidity risk is the risk that an entity may have difficulties in meeting obligations from financial liabilities to be settled with cash or another financial asset.

Cash flows, cash requirements and liquidity are monitored to ensure efficient and effective management of financial resources. The company's objective is the prudent management of the liquidity risk arising from ordinary operations.

As for FS Italiane group's other main companies, the parent's Finance department oversees RFI's liquidity management using the intragroup current account, whereby the company can manage its cash needs for ordinary operations, including by using committed and uncommitted lines that it may request from the parent. At 31 December 2019, RFI had used committed and uncommitted lines for €960 million.

Furthermore, RFI holds a non-interest bearing current account with the MEF, included under cash and cash equivalents to ensure that the amounts disbursed by the government to finance the portion of RFI's investment match the progress of the investments.

The company's financial liabilities mainly refer to the financial resources used for the investments in HS/HC sections.

The following table shows the due dates of financial liabilities, including interest to be paid:

	(€'000)						
31.12.2019	Carrying amount	Contractual cash flows	6 months or less	6-12 months	1-2 years	2-5 years	After 5 years
Non-derivative financial liabilities*							
Bank loans and borrowings	1,199,866	1,392,507	115,101	115,177	230,661	447,532	484,036
Lease liabilities	52,532	55,995	6,672	6,430	12,506	19,802	10,585
Loans and borrowings from other financial backers	86,093	88,610	15,902	15,902	31,804	25,002	-
Loans and borrowings from group companies	2,951,426	3,094,726	1,066,407	490,750	737,104	27,519	772,946
Total	4,289,917	4,631,838	1,204,082	628,259	1,012,075	519,855	1,267,567
Trade payables	3,199,590	3,199,590	228,723	2,952,185	18,682		
Derivatives*	14,682	14,802	3,396	2,923	4,420	4,052	12

*For a better accounting presentation, financial liabilities are shown gross of accrued expenses

	(€'000)						
31.12.2018	Carrying amount	Contractual cash flows	6 months or less	6-12 months	1-2 years	2-5 years	After 5 years
Non-derivative financial liabilities *							
Bank loans and borrowings	1,391,920	1,632,296	114,976	115,082	230,410	580,962	590,866
Lease liabilities							
Loans and borrowings from other financial backers	115,224	120,622	15,902	15,902	31,805	57,013	–
Loans and borrowings from group companies	2,200,156	2,402,501	275,720	239,954	595,754	752,054	539,019
Total	3,707,300	4,155,419	406,598	370,938	857,969	1,390,029	1,129,885
Trade payables	3,218,650	3,218,650	538,040	2,661,888	18,722		
Derivatives*	18,603	19,194	4,080	3,615	5,684	5,774	41

*For a better accounting presentation, financial liabilities are shown gross of accrued interest

The contractual flows from variable-rate loans have been calculated using the forward rates estimated at the reporting date. Loans and borrowings from group companies comprise the current portion of loans from the parent which, due to their nature, are among those due within six months.

With respect to contractual payment dates, the most significant portion relates to trade payables for contracts and works which are mainly repaid through government grants. The residual part is repaid using cash flows from operations.

The following tables show the repayment dates of financial liabilities at 31 December 2019 and 2018 within one year, from 1 to 5 years and after 5 years.

	(€'000)			
31.12.2019	Carrying amount	Within one year	1-5 years	After 5 years
Non-derivative financial liabilities*				
Bank loans and borrowings	1,199,866	199,901	581,234	418,731
Lease liabilities	52,532	12,226	30,425	9,881
Loans and borrowings from other financial backers	86,093	30,057	56,036	–
Loans and borrowings from group companies	2,951,426	1,510,237	702,086	739,103
Total	4,289,917	1,752,421	1,369,781	1,167,715

*For a better accounting presentation, non-derivative financial liabilities are shown gross of accrued expenses

	(€'000)			
31.12.2018	Carrying amount	Within one year	1-5 years	After 5 years
Non-derivative financial liabilities *				
Bank loans and borrowings	1,391,920	196,476	694,487	500,957
Lease liabilities				
Loans and borrowings from other financial backers	115,224	29,130	86,094	–
Loans and borrowings from group companies	2,200,156	458,654	1,242,339	499,163
Total	3,707,300	684,260	2,022,920	1,000,120

*For a better accounting presentation, non-derivative financial liabilities are shown gross of accrued expenses

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument may fluctuate following changes in market prices, due to changes in exchange or interest rates. The objective of market risk management is to manage and maintain the company's exposure to this risk within acceptable levels, while optimising returns on investments. The company uses hedging transactions to manage the volatility of the results.

Interest rate risk

Interest rate risk is associated with the intrinsic variability of market interest rates which generates uncertainties as to the future cash flows associated with financing activities.

With respect to the actual and forecast non-current indebtedness, the company, assisted by the financial risk management services of the parent's Finance department, has adopted an interest rate risk management policy which is aimed at (i) capping total financial expense (including in case of negative scenarios) within a level that does not exceed the assumptions set out in the business plan, while (ii) freeing additional resources with respect to the assumed borrowing cost. RFI's derivatives are plain vanilla collars and interest rate swaps exclusively for hedging purposes in accordance with cash flow hedging requirements.

Interest rate collars with a total notional amount of €300 million were entered into between the end of 2011 and the first few months of 2012 to manage variable-rate debt.

50% of the specific liability is currently hedged, while the residual amount fell due in prior years.

At 31 December 2019, the outstanding notional amount is €50 million.

The interest rate swaps entered into by the company in 2012 following the exercise of the early termination option are the (economic) continuation of the hedges of the variable-rate loans raised in 2002.

At 31 December 2019, the outstanding notional amount is €311 million.

Fair value estimate

The company's portfolio includes over-the-counter (OTC) instruments which are classified as Level 2. Financial instruments have been measured at fair value using financial models based on market standards. Specifically, this entailed:

- determining the net present value of future flows for swaps;
- calculating option contracts (cap and collar) using financial valuation models based on market standards.

The inputs used to feed the above models reflect observable market parameters which are available with the main financial info providers.

Specifically, the swap vs. three-month Euribor curve figures were used, as well as those related to the swap vs. six-month Euribor curve, the Eur interest rate volatility curve and the credit default swap curve (CDS) of the parties to the derivative contract, which reflect the input widely accepted by market operators to calculate non-performance risk. This risk is calculated using adequate financial valuation techniques and models which include,

inter alia, the following factors *i)* the risk exposure, being the potential mark-to-market exposure throughout the life of the financial instrument, *ii)* adequate CDS curves to reflect their probabilities of default (PD).

The table below shows variable and fixed rate loans and borrowings (including the current portion):

	(€'000)					
	Carrying amount	Contractual flows	Current portion	1 and 2 years	2 and 5 years	after 5 years
- variable rate	1,999,753	2,054,840	1,096,758	137,348	227,390	593,344
- fixed rate	2,237,632	2,521,004	722,480	862,222	272,663	663,639
Balance at 31 December 2019	4,237,385	4,575,844	1,819,238	999,570	500,053	1,256,983
- variable rate	1,102,679	1,161,934	305,054	135,489	315,488	405,903
- fixed rate	2,604,621	2,993,486	472,482	722,480	1,074,542	723,982
Balance at 31 December 2018	3,707,300	4,155,420	777,536	857,969	1,390,030	1,129,885

*For a better accounting presentation, financial liabilities are shown gross of accrued expenses

The table below shows the impact of variable- and fixed-rate loans (including the current portion), before and after hedging derivatives, which convert variable rates into fixed rates.

	31.12.2019	31.12.2018
Before hedging with derivatives		
variable rate	47.3%	26.5%
fixed rate	52.7%	73.5%
After hedging with derivatives		
variable rate	37.6%	15.4%
hedged variable rate	2.4%	4.0%
fixed rate	60.1%	80.6%

The following sensitivity analysis shows the effects that would have been recorded in terms of changes in interest expense had an increase or a decrease of 50 basis points in the Euribor interest rates affected loans in 2019:

	+ 50 bps	- 50 bps
Interest expense on variable-rate liabilities	2,854	(1,255)
Net cash flow from hedges	(2,495)	1,940
Total	359	685

If, at the reporting date, the interest rates had been 50 basis points higher, with all other variables being equal, profit for the year net of the tax effect would have been €359 million higher. At the same date, had interest rates been 50 basis points lower, with all other variables being equal, profit for the year would have been €685 million higher.

The following sensitivity analysis shows the effects of a parallel shift of 50 basis points up or down in the swap rate curve at 31 December 2019 on the fair value of the derivative financial instruments. The effects would be substantially recognised in the specific equity reserve.

	+ 50 bps	- 50 bps
Fair value of hedging derivatives	3,685	(3,764)
Total	3,685	(3,764)

Currency risk

RFI is mainly active in Italy as well as in countries of the Eurozone. Therefore, the risk arising from the different currencies in which it operates is very limited.

Capital management

The company's main objective with respect to capital risk management is to safeguard its ability to continue as a going concern, while ensuring benefits for the various stakeholders. The company also intends to maintain an optimal capital structure in order to reduce the cost of debt.

Financial assets and financial liabilities by category

To complete financial risk information, the table below gives a reconciliation between financial assets and financial liabilities as reported in the above tables and the categories of financial assets and financial liabilities identified pursuant to IFRS 7.

	(€'000)		
31.12.2019	Financial assets	Financial liabilities	of which: hedging derivatives
Non-current financial assets (including derivatives)	575,395		
Non-current trade receivables	1,677		
Other non-current assets	4,037,579		
Current trade receivables	676,856		
Current financial assets (including derivatives)	689,333		
Cash and cash equivalents	540,334		
Other current assets	2,125,444		
Non-current loans and borrowings		2,497,189	
Non-current financial liabilities (including derivatives)		53,571	53,571
Non-current trade payables		18,682	
Other non-current liabilities		122,879	
Current loans and borrowings and current portion of non-current loans and borrowings		1,740,196	
Current trade payables		3,180,908	
Current financial liabilities (including derivatives)		14,006	
Other current liabilities		3,282,149	

			(€'000)
31.12.2018	Financial assets	Financial liabilities	of which: hedging derivatives
Non-current financial assets (including derivatives)	1,163,951		
Non-current trade receivables	1,690		
Other non-current assets	3,439,293		
Current trade receivables	684,024		
Current financial assets (including derivatives)	673,106		
Cash and cash equivalents	719,743		
Other current assets	2,840,233		
Non-current loans and borrowings		3,023,040	
Non-current financial liabilities (including derivatives)		17,947	17,947
Non-current trade payables		18,722	
Other non-current liabilities		111,478	
Current loans and borrowings and current portion of non-current loans and borrowings		684,260	
Current trade payables		3,199,928	
Current financial liabilities (including derivatives)		912	
Other current liabilities		4,001,817	

6. Business combinations

Merger of UM Ferro S.r.l. into RFI

As per the resolution passed by RFI's board of directors in its meeting of 5 April 2019, and subsequently approved by the shareholder at the extraordinary meeting of 17 April 2019, on 10 June 2019, RFI acquired 100% of UM Ferro S.r.l., a company set up by Umbria T.P.L e Mobilità S.p.A. and recipient of the contribution of its infrastructure business unit. On 24 June 2019, with accounting effect from 1 July 2019, the merger of UM Ferro S.r.l. into RFI was completed in order to operate the railway line that RFI had taken over pursuant to article 47 of Law decree no. 50 of 2017.

7. Assets held for sale and disposal groups

Assets held for sale and disposal groups decreased by €3,478 thousand following the sale of 100% of Centostazioni Retail S.p.A. in March. FS Italiane S.p.A. and RFI sold the shares to ALTACSRETAILFR S.r.l..

The sale marks the completion of the reorganisation and enhancement of the Centostazioni network and, more in general, the FS Italiane group's travel retail business.

8. Property, plant and equipment

The table below shows the opening and closing balances of property, plant and equipment and changes in the year. It also shows changes in Historical cost, Depreciation and impairment losses and Grants. The balance of Extraordinary maintenance refers to extraordinary maintenance expense incurred and capitalised and, hence, subject to depreciation.

The investments of the year amount to €4,679 million and mainly relate to large-scale infrastructural projects worth approximately €1,205 million, projects to maintain the efficiency of infrastructure and for work throughout Italy (roughly €3,233 million, including technology-related projects of €247 million and extraordinary maintenance work of €809 million completely covered by grants) and right-of-use assets arising from the application of IFRS 16 (about €12 million).

For additional information about placement in service, reference should be made to the paragraph “Main investments in railway operations” of the directors’ report.

Depreciation amounts to €112,564 thousand, of which €12,588 thousand relates to right-of-use assets (IFRS 16).

	(€'000)							
	Land, buildings, railway and port infrastructure	Leasehold improvements	Plant and machinery	Industrial and commercial equipment	Other assets	Assets under construction and payments on account	Extraordinary maintenance	Total
Historical cost	94,822,809	177,364	462,342	794,447	350,422	21,538,296	3,665,025	121,810,704
Depreciation and impairment losses	(23,562,311)	(69,426)	(244,375)	(359,672)	(202,295)	(1,553,597)	–	(25,991,676)
Grants	(41,212,025)	(43,474)	(123,350)	(311,511)	(81,004)	(16,847,122)	(3,665,025)	(62,283,511)
Balance at 31.12.2018	30,048,473	64,463	94,617	123,264	67,124	3,137,577	–	33,535,518
Historical cost	94,859,158	177,364	462,342	794,447	367,194	21,538,296	3,665,025	121,863,825
Depreciation and impairment losses	(23,562,311)	(69,426)	(244,375)	(359,672)	(202,295)	(1,553,597)	–	(25,991,676)
Grants	(41,212,025)	(43,474)	(123,350)	(311,511)	(81,004)	(16,847,122)	(3,665,025)	(62,283,511)
Balance at 01.01.2019	30,084,822	64,463	94,617	123,264	83,896	3,137,577	–	33,588,639
Investments	7,877	–	121	–	5,210	3,857,179	809,343	4,679,731
Placement in service	5,413,756	7,175	81,784	35,603	4,014	(4,628,307)	(914,024)	–
Depreciation	(100,495)	(20)	(2,392)	(2,851)	(6,805)	–	–	(112,564)
Impairment losses	–	–	–	–	–	–	–	–
Non-recurring transactions	–	–	–	–	47	–	–	47
<i>Changes in historical cost due to non-recurring transactions</i>	–	–	–	–	310	–	–	310
<i>Changes in accumulated depreciation due to demergers</i>	–	–	–	–	(263)	–	–	(263)
Change in grants	(5,091,282)	(7,136)	(76,626)	(35,261)	(3,719)	1,068,990	104,681	(4,040,354)
<i>Increases for advances</i>	–	–	–	–	–	(3,231,011)	(809,343)	(4,040,354)
<i>Placement in service</i>	(5,091,282)	(7,136)	(76,626)	(35,261)	(3,719)	4,300,000	914,024	–
Disposals and divestments	(2,379)	–	–	(333)	(589)	10,884	–	7,583
<i>Decreases in historical cost due to disposals and divestments</i>	(10,039)	–	(157)	(1,714)	(7,434)	–	–	(19,344)
<i>Decreases in accumulated depreciation due to divestments</i>	7,280	–	300	950	2,370	–	–	10,901
<i>Decreases in grants due to other divestments</i>	335	–	–	351	4,061	10,884	–	15,632
<i>Decreases in impairment gains/losses due to divestments</i>	45	–	(143)	79	413	–	–	395
Other reclassifications	1,331	571	–	199	(286)	9,395	–	11,209
<i>Changes in historical cost due to other reclassifications</i>	6,466	758	–	(517)	(714)	(103,779)	–	(97,785)
<i>Changes in accumulated depreciation due to reclassifications</i>	(1,499)	(68)	–	1,080	49	–	–	(437)
<i>Changes in grants due to reclassifications</i>	34	(30)	–	(371)	359	113,173	–	113,165
<i>Changes in impairment gains/losses due to reclassifications</i>	(3,671)	(90)	–	7	20	–	–	(3,734)
Total changes	228,808	590	2,886	(2,644)	(2,128)	318,140	–	545,652
Historical cost	100,277,218	185,297	544,089	827,820	368,580	20,663,389	3,560,344	126,426,738
Depreciation and impairment losses	(23,660,651)	(69,604)	(246,610)	(360,407)	(206,509)	(1,553,597)	–	(26,097,378)
Grants	(46,302,938)	(50,640)	(199,976)	(346,793)	(80,303)	(15,654,075)	(3,560,344)	(66,195,068)
Balance at 31.12.2019	30,313,630	65,053	97,504	120,620	81,768	3,455,717	–	34,134,292

	Land, buildings, railway and port infrastructure	Other assets			Total
		Cars	Vehicles	Other	
Historical cost	36,349	16,516	0	256	53,121
Balance at 01.01.2019	36,349	16,516	-	256	53,121
Investments (new leases)	6,394	5,210	121	0	11,725
Depreciation	(7,299)	(5,196)	(7)	(86)	(12,588)
Total changes	(905)	14	114	(86)	(863)
Historical cost	42,743	21,726	121	256	64,846
Depreciation and impairment losses	(7,299)	(5,196)	(7)	(86)	(12,588)
Balance at 31.12.2019	35,444	16,530	114	170	52,258

Grants related to assets

In 2019, grants related to assets totalling €4,040,354 thousand were allocated to assets under construction. Of this amount, €3,719,881 thousand was given by the government. They mainly comprise:

- €3,532,710 thousand, of which €3,417,638 thousand as advances for grants related to assets from the MEF for infrastructure investments in the traditional network and €115,072 thousand to cover the advances paid to suppliers for investment projects covered by grants;
- €187,171 thousand, of which €165,931 thousand as advances for grants related to assets from the MIT for infrastructure investments in the traditional network and €21,240 thousand to cover the advances paid to suppliers for investment projects covered by grants;
- €312,171 thousand mainly related to funds from the EU and local bodies.

9. Investment property

The opening and the closing balances of investment property are given below.

(€'000)

	Land	Buildings	2019 Assets under construction and payments on account	TOTAL	Land	Buildings	2018 Assets under construction and payments on account	TOTAL
Balance at 1 January								
Cost	509,768	594,100	–	1,103,868	827,289	294,908	–	1,122,197
of which:								
Historical cost	1,575,433	1,540,814	–	3,116,248	1,897,250	822,854	–	2,720,104
Accumulated depreciation		(539,339)	–	(539,339)	–	(320,149)	–	(320,149)
Grants	(18,906)	(170,878)	–	(189,784)	(3,540)	(70,316)	–	(73,856)
Net impairment losses	(1,046,759)	(236,497)	–	(1,283,257)	(1,066,421)	(137,481)	–	(1,203,902)
Carrying amount	509,768	594,100	–	1,103,868	827,289	294,908	–	1,122,197
Changes of the year								
Acquisitions (placement in service)	52	88,700	(88,320)	432	113	9,435	–	9,548
Reclassifications	(2,821)	928	31,669	29,777	(317,554)	280,785	–	(36,769)
<i>Changes in historical cost</i>	<i>(6,494)</i>	<i>834</i>	<i>112,236</i>	<i>106,577</i>	<i>(351,250)</i>	<i>677,976</i>	–	<i>326,726</i>
<i>Changes in accumulated depreciation</i>	–	<i>19</i>	–	<i>19</i>	<i>29,414</i>	<i>(205,994)</i>	–	<i>(176,580)</i>
<i>Changes in grants</i>	<i>(1)</i>	<i>(4)</i>	<i>(80,567)</i>	<i>(80,572)</i>	<i>(15,365)</i>	<i>(92,141)</i>	–	<i>(107,506)</i>
<i>Changes in impairment gains/losses</i>	<i>3,675</i>	<i>79</i>	–	<i>3,754</i>	<i>19,647</i>	<i>(99,056)</i>	–	<i>(79,409)</i>
Disposals and divestments	(529)	(586)	–	(1,115)	(79)	(79)	–	(158)
<i>Decreases in historical cost</i>	<i>(3,222)</i>	<i>(1,709)</i>	–	<i>(4,931)</i>	<i>(100)</i>	<i>(229)</i>	–	<i>(329)</i>
<i>Decrease in accumulated depreciation</i>	–	<i>905</i>	–	<i>905</i>	<i>7</i>	<i>110</i>	–	<i>117</i>
<i>Decreases in grants</i>	–	<i>17</i>	–	<i>17</i>	–	–	–	–
<i>Decreases in impairment gains/losses</i>	<i>2,693</i>	<i>201</i>	–	<i>2,894</i>	<i>14</i>	<i>40</i>	–	<i>54</i>
Non-recurring transactions	–	–	–	–	–	19,158	–	19,158
<i>Changes in historical cost</i>	–	–	–	–	–	<i>30,778</i>	–	<i>30,778</i>
<i>Changes in accumulated depreciation</i>	–	–	–	–	–	<i>(11,620)</i>	–	<i>(11,620)</i>
Increases/decreases due to impairment gains/losses	(16,027)	–	–	(16,027)	–	–	–	–
Change in grants	(49)	(80,567)	80,567	(49)	–	(8,422)	–	(8,422)
Depreciation	–	(2,370)	–	(2,370)	–	(1,686)	–	(1,686)
Total changes	(19,373)	6,106	23,917	10,649	(317,520)	299,192		(18,328)
Balance at								
Cost	490,395	600,206	23,917	1,114,517	509,768	594,100	0	1,103,868
of which:								
Historical cost	1,549,743	1,628,639	23,917	3,202,299	1,575,433	1,540,814	–	3,116,248
Accumulated depreciation	–	(540,784)	–	(540,784)	–	(539,339)	–	(539,339)
Grants	(18,956)	(251,432)	–	(270,388)	(18,906)	(170,878)	–	(189,784)
Net impairment losses	(1,040,392)	(236,217)	–	(1,276,609)	(1,046,759)	(236,497)	–	(1,283,257)
Carrying amount	490,395	600,206	23,917	1,114,517	509,768	594,100	0	1,103,868

10. Intangible assets

The table below shows the opening and closing balances of intangible assets and changes in the year.

	(€'000)			
	Development expenditure	Concessions, licences, trademarks and similar rights	Assets under development and payments on account	Total
Historical cost	114,412	580,990	487,206	1,182,609
Amortisation and impairment losses	(80,380)	(145,011)	(4,746)	(230,136)
Grants	(13,851)	(288,871)	(18,570)	(321,291)
Balance at 31.12.2018	20,181	147,108	463,891	631,181
Investments/acquisitions	–	–	113,051	113,051
<i>Historical cost of investments/acquisitions</i>	–	–	113,051	113,051
<i>Accumulated amortisation of investments/acquisitions</i>	–	–	–	–
Placement in service	9,502	23,730	(33,231)	–
Amortisation	(480)	(3,326)	–	(3,806)
Impairment losses	–	–	–	–
Changes and grants	(8,884)	(23,673)	32,557	–
Disposals and divestments	–	–	–	–
Non-recurring transactions	–	(4,233)	–	(4,233)
<i>Changes in historical cost due to non-recurring transactions</i>	–	(46,855)	–	(46,855)
<i>Changes in accumulated amortisation due to non-recurring transactions</i>	–	1,621	–	1,621
<i>Changes in impairment gains/losses due to non-recurring transactions</i>	–	1,082	–	1,082
<i>Changes in grants due to non-recurring transactions</i>	–	39,920	–	39,920
Other reclassifications	–	78	(41,015)	(40,937)
<i>Changes in historical cost due to other reclassifications</i>	–	106	(8,458)	(8,351)
<i>Changes in accumulated amortisation due to other reclassifications</i>	–	(23)	–	(23)
<i>Changes in grants due to other reclassifications</i>	–	13	(32,557)	(32,544)
<i>Changes in impairment gains/losses due to reclassifications</i>	–	(20)	–	(20)
Total changes	137	(7,424)	71,362	64,076
Historical cost	123,914	557,971	558,568	1,240,453
Amortisation and impairment losses	(80,860)	(145,676)	(4,746)	(231,281)
Grants	(22,735)	(272,611)	(18,570)	(313,916)
Balance at 31.12.2019	20,319	139,684	535,253	695,256

11. Equity investments

The tables below show equity investments' opening and closing balances, broken down by category.

	(€'000)	
	31.12.2019	31.12.2018
Investments in:		
Subsidiaries	85,467	79,567
Associates	7,077	7,077
Other companies	49,012	49,012
Total	141,556	135,656

	Carrying amount 31.12.2018	Changes of the year				Carrying amount 31.12.2019
		Acqu./ subscriptions	Impairment losses/ gains	Reclassifications	Divestments/ repayments	
(€'000)						
Investments in subsidiaries						
Blu Jet S.r.l.	200	-	-	-	-	200
Tunnel Ferroviario del Brennero - Società di partecipazioni S.p.A.	48,455	-	-	-	-	48,455
Terminali Italia S.r.l.	6,538	2,700	-	-	-	9,238
Bluferries S.r.l.	21,229	-	-	-	-	21,229
Grandi Stazioni Rail S.p.A.	3,145	-	-	-	-	3,145
UM Ferro S.r.l.	-	308	-	-	(308)	-
Infrarail Firenze S.r.l.	-	3,200	-	-	-	3,200
Investments in associates						
Quadrante Europa Terminal Gate S.p.A.	7,077	-	-	-	-	7,077
Other companies						
Isfort S.p.A.	48	-	-	-	-	48
Stretto di Messina S.p.A. in liquidation	48,882	-	-	-	-	48,882
Interporto Marche S.p.A.	82	-	-	-	-	82
Total	135,656	6,208	-	-	(308)	141,556

	Carrying amount 31 December 2017	Changes of the year				Carrying amount 31.12.2018
		Acqu./ subscriptions	Impairment losses/ gains	Reclassifications	Divestments/ repayments	
(€'000)						
Investments in subsidiaries						
Blu Jet S.r.l.	-	200	-	-	-	200
Tunnel Ferroviario del Brennero - Società di partecipazioni S.p.A.	48,455	-	-	-	-	48,455
Terminali Italia S.r.l.	6,538	-	-	-	-	6,538
Bluferries S.r.l.	21,229	-	-	-	-	21,229
Grandi Stazioni Rail S.p.A.	-	3,145	-	-	-	3,145
Investments in associates						
Quadrante Europa Terminal Gate S.p.A.	7,077	-	-	-	-	7,077
Other companies						
Isfort S.p.A.	48	-	-	-	-	48
Stretto di Messina S.p.A. in liquidation	48,882	-	-	-	-	48,882
Interporto Marche S.p.A.	82	-	-	-	-	82
Total	132,311	3,345	-	-	-	135,656

In 2019, equity investments, amounting to €141,556 thousand, increased by €5,900 thousand. The rise is due to the incorporation of Infrarail Firenze S.r.l., which is wholly owned by RFI, and the acquisition of a non-controlling interest in Terminali Italia S.r.l., which is controlled by Mercitalia Intermodal S.p.A.. During the year, UM Ferro S.r.l. was merged into RFI. Furthermore, the €112,344 thousand increase in the investment in Tunnel Ferroviario del Brennero-Società di Partecipazioni S.p.A. is not shown, as it was entirely offset by the rise in grants related to assets received from the MEF and transferred to the subsidiary in connection with the financial investments funded by chapter 7122

In the following table, the carrying amounts of investments in subsidiaries and associates are compared with the corresponding portions of equity.

(€'000)

	Registered office	Share/quota capital	Profit (loss) for the year	Equity at 31.12.2019	% of investment	Attributable equity (a)	Carrying amount at 31.12.2019 (b)	Difference (b) - (a)
Investments in subsidiaries								
Blu Jet S.r.l.	Messina, Via Calabria 1	200	97	1,252	100.00%	1,252	200	(1,052)
Tunnel Ferroviario del Brennero - Società di partecipazioni S.p.A.	Rome, Piazza della Croce Rossa 1	825,791	62	827,837	88.99%	736,708	48,455	(688,254)
Terminali Italia S.r.l.	Rome, Piazza della Croce Rossa 1	7,346	3,210	21,777	100.0%	21,777	9,238	(12,540)
Bluferries S.r.l.	Messina, Via Calabria 1	20,100	2,173	31,781	100.0%	31,781	21,229	(10,552)
Grandi Stazioni Rail S.p.A.*	Rome, Via Giolitti 34	4,304	5,944	50,060	100.0%	50,060	3,145	(46,915)
Infrarail Firenze S.r.l.	Florence, Viale Francesco Redi 2	200	(57)	3,143	100.0%	3,143	3,200	57
Investments in associates								
Quadrante Europa Terminal Gate S.p.A.	Verona, Via Sommacampagna 61	16,876	(110)	14,189	50.0%	7,095	7,077	(18)

*The company applies IFRS.

(€'000)

	% of investment	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities	Revenue	Costs	Profit/(loss)
31.12.2019										
Investments in associates										
Quadrante Europa Terminal Gate S.p.A.	50.00%	1,028	17,208	18,237	1,105	2,942	4,047	1,167	1,277	(110)
31.12.2018										
Investments in associates										
Quadrante Europa Terminal Gate S.p.A.	50.00%	964	17,457	18,421	907	3,325	4,232	1,201	1,286	(85)

12. Non-current and current financial assets (including derivatives)

Financial assets are broken down below.

(€'000)									
Carrying amount									
	31.12.2019			31.12.2018			Change		
	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total
Financial assets									
Fifteen-year grants from the MEF	489,094	590,326	1,079,420	1,079,420	582,888	1,662,308	(590,326)	7,438	(582,888)
Loans	86,824	–	86,824	85,529	–	85,529	1,295	–	1,295
Other loans	–	99,504	99,504	–	90,733	90,733	–	8,771	8,771
Total	575,918	689,830	1,265,748	1,164,949	673,621	1,838,570	(589,031)	16,209	(572,822)
Loss allowance	(523)	(497)	(1,020)	(998)	(515)	(1,513)	475	18	493
total net of the loss allowance	575,395	689,333	1,264,728	1,163,951	673,106	1,837,057	(588,556)	16,227	(572,329)

Fifteen-year grants from the MEF, of €1,079,420 thousand, can be analysed as follows:

- €287,386 thousand related to the fifteen-year grants pursuant to article 1.84 of the 2006 Finance Act for the implementation of railway investments, obtained by means of discounting;
- €792,034 thousand related to the fifteen-year grants pursuant to article 1.964 of the 2007 Finance Act for the continuation of the projects involving the HS/HC capacity system of the Turin-Milan-Naples line.

The €582,888 thousand decrease in the amount due from the MEF is mainly due to:

- the net decrease of €182,889 thousand in the grants as per article 1.84 of the 2006 Finance Act, due to the combined effect of the additional allocation of €17,111 thousand for interest accrued in 2019, and the collection of €200,000 thousand of the annual grant from the granting body in accordance with the collection proxy that it was given;
- €400,000 thousand related to the decrease in the grants described in the above-mentioned article 1.964 of the 2007 Finance Act, due to the collection of the annual grant.

Non-current loans of €86,824 thousand mainly relate to the restricted current account with Unicredit (€81,810 thousand). The amounts are generally restricted following attachment by third party suppliers as a result of unhonoured orders/injunctions to pay.

The €8,771 thousand increase in Other loans reflects the rise in the amount due from the parent in respect of the intragroup current account on the previous year end.

13. Other current and non-current assets

They can be analysed as follows:

	31.12.2019			31.12.2018			Change		
	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total
Other assets from group companies	16,205	49,315	65,520	160,899	30,640	191,539	(144,694)	18,675	(126,019)
VAT assets	9	-	9	9	-	9	-	-	-
MEF and MIT	4,020,967	1,752,388	5,773,355	3,277,875	2,465,380	5,743,255	743,092	(712,992)	30,100
Grants related to assets from the EU, other Ministries and other	-	11,636	11,636	-	65,199	65,199	-	(53,563)	(53,563)
Other government authorities	-	51,334	51,334	-	96,653	96,653	-	(45,319)	(45,319)
Sundry assets	3,344	290,126	293,470	3,202	215,240	218,442	142	74,886	75,028
Prepayments and accrued income	-	9,825	9,825	-	7,743	7,743	-	2,082	2,082
Total	4,040,525	2,164,624	6,205,149	3,441,985	2,880,855	6,322,840	598,540	(716,231)	(117,691)
Loss allowance	(2,946)	(39,180)	(42,126)	(2,692)	(40,622)	(43,314)	(254)	1,442	1,188
Total net of the loss allowance	4,037,579	2,125,444	6,163,023	3,439,293	2,840,233	6,279,526	598,286	(714,789)	(116,503)

The net decrease of €126,019 thousand in Other assets from group companies is mainly due to the combined effect of the following factors:

- the decrease in VAT assets from the parent due after one year (€22,860 thousand) mainly in respect of the 2019 VAT;
- the collection of the 2017 VAT asset from the parent due within one year (€109,327 thousand);
- the increase in other non-trade amounts due from other group companies (€6,170 thousand) mainly due to the rise in amounts due for fees and safety services (€3,899 thousand) and for penalties connected to the performance regime (€2,061 thousand).

The amounts due from the MEF and the MIT at 31 December 2019 are analysed below:

	31.12.2018				31.12.2019			
		Increases	Decreases	Other changes				
Grants related to income:								
- MEF: chap. 1541	-	1,015,557	(1,015,557)		-			
- MIT: chap. 7255		7,100			7,100			
Grants related to goods:								
- MIT: chap. 1274 - 7302	115,000	104,811	(99,905)		119,906			
Grants related to assets and investments:								
- MEF: chap. 7122-7123-8000	4,031,535	2,932,119	(2,552,116)		4,411,538			
- MIT: chap. 7060-7514-7515-7518-7540-7532-7549-7550-7563 -1274	1,596,721	40,990	(402,900)		1,234,811			
Total	5,743,256	4,100,577	(4,070,478)		5,773,355			

During the year, the caption rose by a net €30,099 thousand due to the combined effect of the following factors:

- the recognition of new grants related to income, goods, assets and investments of €4,100,577 thousand, broken down as follows:

- €1,015,557 thousand granted using the chapter 1541 funds of the MEF in accordance with Law no. 145 of 30 December 2018 (the 2019 Budget Act).
- grants related to goods of €104,811 thousand using chapter 1274 funds of the MIT in accordance with the allocations pursuant to article 1.294 of Law no. 190/2014, allocated to the MIT with article 11.2-ter of Law decree no. 185 of 25 November 2015 to be transferred to railway companies (of which €99,906 thousand and €4,905 thousand pertaining to 2019 and 2018, respectively);
- €7,100 thousand using chapter 7255 funds earmarked for "passenger transport in the Messina Strait", services that RFI provided in 2019, first through the subsidiary Blufferries S.r.l. and subsequently, as of 1 May 2019, through the newco Blu Jet S.r.l. (also wholly owned by RFI);
- grants related to assets of €2,932,119 thousand (MEF chapters), of which:
 - €120,400 thousand related to the funds for 2019 allocated under article 1.140 of the 2017 Budget Act and drawn from chapter 7122-MP2 by the MEF decree no. 177410 dated 16 October 2017;
 - €120,000 thousand from chapter 7518 of the MIT and reformulated under the 2019 Budget adjustment law;
 - €460,000 thousand allocated under Law decree no. 124 of 29 October 2019 (Tax decree) converted into Law no. 157 of 19 December 2019 funded by chapter 7122 of MP;
 - €750,000 thousand (chapter 7122 - MP5) for 2019, allocated under article 1.73 of Law no. 147/2013 (2014 Stability Act) for extraordinary maintenance in relation to the amounts due as part of the 2016 - 2021 Government Programme Contract - Services currently in effect and refinanced by Law no. 2016/2021 (2015 Stability Act)
 - €120,000 thousand (chapter 7122 – MP7) for 2019, allocated under article 1.76 of Law no. 147/2013 (2014 Stability Act) for the Brescia Verona Padua – Apice Orsara line, and refinanced by Law no. 190/2015 (2015 Stability Act) and reformulated under chapter 7122 - MP2;
 - €42,000 thousand (chapter 7122 – MP9) for 2019, allocated under article 1.591 of Law no. 232/2016 (2018 Budget Act) for the construction of the new Ferrandina – Matera la Martella railway line and reformulated for collection under chapter 7122 - MP2;
 - €7,000 thousand (chapter 7122 – MP10) for the 2019 funds allocated under article 1.1072 of the 2018 Budget Act and funded by chapter 7122 - MP2;
 - €1,915 thousand (chapter 7123) for 2019 covered by Law no. 145 of 30 December 2018 (2019 Budget Act);
 - €895,313 thousand following the recognition of additional grants related to assets from the MEF for the resources covered by chapter 7122 MP2 for the 2020-2022 three-year period to finance the work performed in 2019;
 - €369,139 thousand following the recognition of additional grants related to assets from the MEF for the resources covered by chapter 7122, of which €123,864 thousand related to MP10 and €245,275 thousand related to MP11 for the 2020-2022 three-year period to finance the work performed in 2019.

- €46,352 thousand following the recognition of additional grants related to assets from the MEF for the resources covered by chapter 7122 MP4 for the 2020-2022 three-year period to finance the work performed in 2019.
 - €40,990 thousand covered by the MIT chapters, of which:
 - €25,990 thousand (chapter 7564) allocated under Law no. 164/2014 ("Get Italy Moving" law) for 2019 for works related to the quadrupling of the Pistoia - Lucca section;
 - €15,000 thousand (chapter 7549) allocated under Law no. 164/2014 for 2019 for the elimination and automation of railroad crossings, making the terminal section of the Adriatic Bologna-Lecce corridor in Puglia a priority;
- decreases due to collections of €4,070,478 thousand, broken down as follows:
- €1,015,557 thousand (MEF chapter 1541 – grants related to income);
 - €2,552,116 thousand (MEF chapter 7122/7123) for various management programmes (MP1, MP2, MP4, MP5, MP7 and MP8), including €460,000 thousand allocated under Law decree no. 124 of 29 October 2019 (Tax decree);
 - €60,312 thousand (MIT chapter 7540) covered by Law decree no. 69/2013 for work to improve the railway network (Get it Done decree);
 - €24,307 thousand (MIT chapter 7060) allocated under Law no. 443/2001 ("Obiettivo law"), for the HS/HC Milan-Genoa line: Third Giovi pass;
 - €127,377 thousand (MIT chapter 7518) allocated under Law no. 164/2014 ("Get Italy Moving" law);
 - €69,680 thousand (MIT chapter 7518) allocated under CIPE resolution no. 86/2011, covered by article 32.1 of Law decree no. 98/2011 and assigned to RFI for the HS/HC Milan-Genoa line: Third Giovi pass - third construction lot;
 - €50,660 thousand (MIT chapter 7515) allocated under CIPE resolution no. 85/2011 covered by article 32.1 of Law decree no. 98/32 (Railway and road infrastructure fund) assigned to RFI for the HS/HC Milan-Verona line: Treviglio Brescia section - second construction lot;
 - €44,574 thousand (MIT chapter 7549) allocated by Law no. 164/2014 ("Get Italy Moving" law);
 - €25,990 thousand (MIT chapter 7564) allocated by article 3.2 b) of Law decree no. 133/2014 converted into Law no. 164/2014, ("Get Italy Moving" law) for works related to the quadrupling of the Pistoia - Lucca line;
 - €99,905 thousand (MIT chapter 1274) allocated to incentivise freight transport in 2018 and transferred to the railway companies.

Grants related to assets - EU, other ministries and ordinary customers of €11,636 thousand include the grants received from the European Union, other ministries and other bodies.

Sundry receivables and prepayments and accrued income can be analysed as follows:

	(€'000)		
Sundry assets and prepayments and accrued income	31.12.2019	31.12.2018	Change
Advances to suppliers - current services	202,582	117,718	84,864
Personnel	6,676	6,713	(37)
Social security institutions	7,468	5,285	2,183
Assets under collection	497	497	–
Insurance compensation from insurance companies	279	266	13
Other non-trade amounts	75,968	87,963	(11,995)
	293,470	218,442	75,028
Prepayments and accrued income	9,825	7,743	2,082
Total	303,295	226,185	77,110

The increase in Sundry assets and prepayments and accrued income (€77,110 thousand) is mainly due to the combined effect of the following factors:

- the €84,864 thousand increase in advances to suppliers, mainly electrical energy suppliers;
- the €2,183 thousand increase in amounts due from social security institutions, mainly due to the post-employment benefits paid in advance to employees;
- the €11,995 thousand decrease in other non-trade amounts essentially due to the performance regime and the reduction in sundry taxes to be recovered.

Specifically, other non-trade amounts mainly reflect amounts for foreign VAT recovery (€13,597 thousand), fees from other railway companies (€2,531 thousand) and performance regime amounts (€7,045 thousand).

The non-trade amounts from CSEA (the environmental and energy services fund) were reclassified from sundry assets to government and other public authorities under Other current assets.

The following table gives a breakdown of other non-current and current assets by geographical segment:

	(€'000)		
	31.12.2019	31.12.2018	Change
Italy	6,188,268	6,304,416	(116,148)
Eurozone countries	1,000	905	95
United Kingdom	89	270	(181)
Other European countries (EU, non-Euro)	1	–	1
Other non-EU European countries	15,751	17,210	(1,459)
United States	5	7	(2)
Other countries	35	32	3
	6,205,149	6,322,840	(117,691)

14. Inventories

Inventories may be analysed as follows:

	(€'000)		
	31.12.2019	31.12.2018	Change
Raw materials, consumables and supplies	877,094	752,853	124,241
Allowance for inventory write-down	(13,245)	(11,636)	(1,609)
Total inventories	863,849	741,217	122,632

The net increase in raw materials, consumables and supplies amounts to €122,632 thousand and is mainly due to:

- the purchase of materials (€755,883 thousand);
- the use of materials (€781,781 thousand);
- the production output at the national workshops of Bari, Pontassieve and Bologna for the production of frogs, switches, glued insulating joints and electric devices;
- the net increase of €1,609 thousand in the allowance for inventory write-down due to the scrapping of the year (€1,129 thousand) and the accrual (€2,738 thousand) following the analysis of obsolete and slow-moving materials.

15. Non-current and current trade receivables

They can be analysed as follows:

	31.12.2019			31.12.2018			Change		
	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total
Ordinary customers	97	351,974	352,071	103	349,134	349,237	(6)	2,840	2,834
Government and other public authorities	1,582	68,090	69,672	1,590	59,573	61,163	(8)	8,517	8,509
Foreign railways	–	1,517	1,517	–	1,178	1,178	–	339	339
Railways under concession	–	2	2	–	2	2	–	–	–
Assets from group companies	–	355,354	355,354	–	377,763	377,763	–	(22,409)	(22,409)
Total	1,679	776,937	778,616	1,693	787,650	789,343	(14)	(10,713)	(10,727)
Loss allowance	(2)	(150,511)	(150,513)	(3)	(148,302)	(148,305)	1	(2,209)	(2,208)
Total net of the loss allowance	1,677	626,426	628,103	1,690	639,348	641,038	(13)	(12,922)	(12,935)
Contract assets	–	50,690	50,690	–	45,132	45,132	–	5,558	5,558
Loss allowance	–	(260)	(260)	–	(456)	(456)	–	196	196
Total contract assets	–	50,430	50,430	–	44,676	44,676	–	5,754	5,754
Total current and non-current trade receivables	1,677	676,856	678,533	1,690	684,024	685,714	(13)	(7,168)	(7,181)

The €2,840 thousand increase in trade receivables from ordinary customers (current portion) on the previous year end, gross of the related loss allowance, is mainly due to the following factors:

- the €9,714 thousand increase in invoices issued, mainly due to the rise in trade receivables from contractors for penalties related to ballast disposal (€5,300 thousand) and fees for the maintenance and remote control of the high voltage lines (approximately €1,800 thousand) and the increase in amounts due in connection

with property (roughly €8,800 thousand) for lease payments, partly offset by the decrease in fees to use property (about €6,300 thousand);

- the €5,700 thousand increase in credit notes to be issued mainly related to electric traction (€4,045 thousand) and fees (€1,667 thousand);
- the €6,146 thousand decrease in default interest mainly due to the reduction of approximately €4,300 thousand in property-related amounts receivable and €1,800 thousand on non-property amounts receivable;
- the €4,972 thousand increase in invoices to be issued.

The current portion of government and other public authorities increased by €8,517 thousand on 31 December 2018, gross of the related loss allowance, mainly as a consequence of the combined effect of:

- the €1,436 thousand increase in invoices mainly due to the rise in property-related amounts receivable for level crossings and parallel routes (€1,200 thousand);
- the €1,867 thousand increase in default interest, mainly due to the rise of approximately €2,200 thousand in non-property trade receivables offset, in part, by the reduction of roughly €300 thousand in interest on property-related amounts receivable;
- the €5,214 thousand increase in invoices to be issued.

Assets from group companies decreased by a net €22,409 thousand mainly due to the following factors:

- the €3,903 thousand increase in amounts due from the parent;
- the €24,124 thousand decrease in amounts due from related companies, mainly attributable to the collection of the invoice issued to TELT S.a.s. for advances on the work on the Turin-Bussoleno section (€27,000 thousand), the rise in credit notes to be issued (€8,230 thousand), partly offset by the increase in amounts due from Ferrovie del Sud Est S.r.l. (€10,581 thousand) for work on the Puglia railway line and the recharging for seconded personnel;
- the €1,592 thousand decrease in amounts due from subsidiaries, mainly due to the collection and offsetting of Terminali Italia S.r.l.'s invoices;
- the decrease in amounts due from associates (€596 thousand).

Contract assets amounting to €50,690 thousand reflect the amount due from customers for construction contracts in progress. The €5,558 thousand increase on 31 December 2018 is essentially due to the percentage of completion, which is higher than the amount of invoicing.

In order to show the progress of work considering the amounts already invoiced for contract assets, this caption should be considered together with the corresponding portion included under contract liabilities. The €11,585 thousand balance, which increased by €2,948 thousand, is mainly due to the fact that progress payments are lower than the percentage of completion of contract work in progress.

	31.12.2019		31.12.2018	
	Assets	Liabilities	Assets	Liabilities
Contract work in progress	183,906	32,478	151,430	28,836
Progress payments from customers	(133,216)	(44,063)	(106,298)	(37,473)
Total	50,690	(11,585)	45,132	(8,637)

Amounts are shown gross of the loss allowance.

The maximum exposure to credit risk, broken down by geographical segment, is as follows:

	(€'000)		
	31.12.2019	31.12.2018	Change
Italy	822,416	828,838	(6,422)
Eurozone countries	4,228	3,466	762
United Kingdom	7	7	–
Other European countries			–
Other European countries (EU, non-Euro)	100	150	(50)
Other non-EU European countries	2,539	1,998	541
United States			–
Other countries	16	16	–
	829,306	834,475	(5,169)

16. Cash and cash equivalents

They can be analysed as follows:

	(€'000)		
	31.12.2019	31.12.2018	Change
Bank and postal accounts	3,173	3,021	152
Cash and cash on hand	452	168	284
Treasury current accounts	536,987	716,987	(180,000)
Other	111	111	–
Total	540,723	720,287	(179,564)
Loss allowance	(389)	(544)	155
total net of the loss allowance	540,334	719,743	(179,409)

The overall decrease in the caption on 31 December 2018 is substantially due to the reduction in the treasury current account which receives the payments made by the MEF in relation to the Government Programme Contract and those related to other grants disbursed by the European Commission and subsequently transferred to the intragroup current account in accordance with cash needs. For information on the reasons underlying changes in cash and cash equivalents, reference should be made to the statement of cash flows.

Furthermore, attachments were notified to banks without generating availability restrictions (labour disputes), totalling €11,359 thousand, in addition to attachments which qualify as “restricted amounts on bank and postal accounts” of €1,773 thousand.

17. Tax assets

Tax assets amount to €16,516 thousand at 31 December 2019. This caption includes:

- the tax credit for IRAP self-taxation (€16,250 thousand) claimed for reimbursement, which refers to payments on account for 2014 not offset against future IRAP liabilities;
- the IRES tax asset for withholding taxes (in prior tax years, before participating in the tax consolidation scheme) of €265 thousand.

18. Equity

Changes in the main equity captions in 2019 are shown in the statement of changes in equity to which reference should be made.

Share capital

At 31 December 2019, the company's fully subscribed and paid-up share capital is made up of 31,528,425,067 ordinary shares, with a nominal amount of €1 each, for a total of €31,528,425,067.

Legal reserve

At 31 December 2019, it amounts to €83,630 thousand, following the allocation of a portion of the profit for 2018, equal to €13,710 thousand.

Other reserves

The reserve for non-recurring transactions amounts to €73,859 thousand at 31 December 2019, up by €4,689 thousand on 31 December 2018 following the demerger of the ICT business unit to FSTechnology S.p.A..

Valuation reserves

Hedging reserve

The hedging reserve includes the effective portion of the cumulative net change in the fair value of cash flow hedges relating to transactions that have not yet taken place and the residual portion of the cumulated reserve with previous financial instruments in relation to which, in 2012, the counterparties exercised the contractually-permitted early termination option.

At 31 December 2019, this reserve was negative by €42,266 thousand, up by €17,366 thousand on 31 December 2018. The increase is due to the following factors:

- the fair value measurement of hedging instruments at the reporting date (increase of €3,874 thousand);
- the release of the portion of 2018 following the above-mentioned early termination of contracts in 2012 (increase of €13,492 thousand);

Actuarial reserve

The actuarial reserve includes the effects of actuarial gains and losses on post-employment benefits and the Free Travel Card. The net balance of this reserve is a negative €141,909 thousand at the reporting date, up on the previous year-end balance following the changes of the year. The total actuarial loss amounts to €11,521 thousand.

Retained earnings

At 31 December 2019, retained earnings amount to €1,911,631 thousand, a net increase of €160,486 thousand on the previous year due to the allocation of the profit for 2018 resolved by shareholder in the meeting of 5 April 2019.

Profit for the year

The company ended the year with a profit of €301,933 thousand.

The origin, availability and distribution of equity captions, as well as their use in the past three years, are shown below.

Origin	Balance at 31.12.2019 (a+b)	Unavailable portion (a)	Possibility of use ***	Available portion (b)	Summary of uses in the past three years**				
					Available portion of (b)	Capital increase	Coverage of losses	Dividends	Other (Demergers)
Share capital:									
Share capital	31,528,425	31,528,425							-
Income-related reserve:									
Legal reserve	83,630	83,630	B						
Retained earnings *	1,911,631	(65,342)	A, B, C	1,976,973	946,616				
Other reserves:									
Hedging reserve	(42,266)	(42,266)							
Income-related reserve and actuarial losses	(141,909)	(141,909)							
Reserve for non-recurring transactions	73,859		A,B,C	73,859	73,859				
TOTAL	33,413,370	31,362,538	-	2,050,832	1,020,475	-	-	-	-

* total equity is shown net of the profit for 2019 (€301,933 thousand)

** 2016-2017-2018

*** A = Capital increase; B = Coverage of losses; C = Dividends

19. Non-current loans and borrowings

(€'000)

Non-current loans and borrowings	31.12.2019	Carrying amount	
		31.12.2018	Change
Bank loans and borrowings	999,965	1,195,444	(195,479)
Loans and borrowings from other financial backers	56,036	86,094	(30,058)
Loans and borrowings from group companies	1,441,188	1,741,502	(300,314)
Total	2,497,189	3,023,040	(525,851)

(€'000)

Current loans and borrowings and current portion of non-current loans and borrowings*	31.12.2019	Carrying amount	
		31.12.2018	Change
Bank loans and borrowings (current portion)	199,901	196,476	3,425
Loans and borrowings from other financial backers (current portion)	30,057	29,130	927
Loans and borrowings from group companies (current portion)	1,510,238	458,654	1,051,584
Total	1,740,196	684,260	1,055,936

* It mainly refers to the current portion of non-current loans and borrowings

(€'000)

Loans and borrowings	31.12.2019	Carrying amount	
		31.12.2018	Change
Bank loans and borrowings	1,199,866	1,391,920	(192,054)
Loans and borrowings from other financial backers	86,093	115,224	(29,131)
Loans and borrowings from group companies	2,951,426	2,200,156	751,270
Total loans and borrowings	4,237,385	3,707,300	530,085

Bank loans and borrowings (non-current and current) amount to €1,199,866 thousand and are shown gross of accrued expenses not yet paid (€4,421 thousand). This caption is entirely comprised of liabilities with the European Investment Bank (EIB). The €192,054 thousand decrease on the previous year end refers to the €191,152 thousand decrease due to the principal repaid in 2019 and the €903 thousand decrease in accrued expenses included under the current portion.

Loans and borrowings from other financial backers (non-current and current) amount to €86,093 thousand and are entirely comprised of liabilities with Cassa Depositi e Prestiti (CDP). The €29,131 thousand decrease on 31 December 2018 is due to the principal of the same amount repaid in 2019.

Loans and borrowings from group companies (non-current and current) amount to €2,951,426 thousand and are shown gross of accrued expenses not yet paid (€9,067 thousand). Specifically, they refer to liabilities with the parent related to two intragroup agreements for the transfer of contracts that the parent signed with CDP and the EIB, respectively, to finance investments and for the loans and borrowings related to the two tranches of the bond that Ferrovie dello Stato Italiane S.p.A. placed on the market in 2013, 2017, 2018 and 2019 as part of the FS EMTN Programme.

Specifically, in 2019, the parent entered into two new intragroup agreements totalling €240,000 thousand as part of the FS EMTN Programme. They have a ten-year term and substantially reflect the same obligations and conditions agreed by the parent on the financial markets. Both loans will cover the 2018 and 2019 funding requirements for the HS/HC Turin-Milan-Naples investments.

Furthermore, during the year, in order to guarantee the company's operations, the short-term credit lines in place with the parent were extended up to €1,100,000 thousand. A total of €960,000 thousand was drawn from these credit lines during the year.

The €751,270 thousand increase in these liabilities on 31 December 2018 is due to the combined effect of the following factors:

- the €239,811 thousand increase following the signing of another intragroup loan agreement as part of the FS EMTN Programme;
- the €790,000 thousand increase following the use of the revolving credit lines available to the company;
- the €1,034 thousand increase in amortised cost accruals;
- the €279,495 thousand decrease due to the repayment of the principal of the loans and borrowings from Ferrovie dello Stato Italiane S.p.A. for Cassa Depositi e Prestiti (traditional network and HS/HC network) made in 2019, which corresponds with the change in the corresponding amounts due from the MEF. For additional information, reference should be made the note to financial assets;
- the €79 thousand decrease in accrued expenses, included under the current portion;

The terms and conditions of non-current loans and borrowings in place, net of accrued interest, are summarised in the table below:

(€'000)

Type of work	Currency	Note	Nom. interest rate	Year of expiry	31.12.2019		31.12.2018	
					Nom. amount	Carr. amount	Nom. amount	Carr. amount
HS/HC	EIB 1	€	Fixed	2023	99,955	99,955	125,230	125,230
HS/HC	EIB 2	€	Fixed	2023	78,448	78,448	95,644	95,644
HS/HC	EIB 3	€ (1)	Variable	2024	250,000	250,000	305,556	305,556
HS/HC	EIB 4	€ (3)	Fixed/Var.	2030	319,544	319,544	340,624	340,624
HS/HC	EIB 5	€ (1)	Variable	2025	10,667	10,667	12,444	12,444
HS/HC	EIB 6	€ (2)	Fixed	2032	138,481	138,481	146,323	146,323
HS/HC	EIB 7	€ (3)	Fixed/Var.	2032	198,349	198,349	210,775	210,775
HS/HC	CASSA DEPOSITI E PRESTITI 1	€ (4)	Fixed	2021	36,094	36,094	52,724	52,724
HS/HC	CASSA DEPOSITI E PRESTITI 2	€ (1) (4)	Variable	2023	50,000	50,000	62,500	62,500
HS/HC	INTRAGROUP CDDPP/FS HS	€ (7)	Fixed	2021	97,060	97,060	190,326	190,326
Traditional netw.	INTRAGROUP CDDPP/FS TN	€ (7)	Fixed	2021	190,326	190,326	279,949	279,949
HS/HC	INTRAGROUP EIB/FS	€	Fixed	2021	207,002	207,002	303,608	303,608
					1,675,925	1,675,925	2,125,702	2,125,702
HS/HC	EIB 300	€ (5) (6)	Variable	2021	100,000	100,000	150,000	150,000
HS/HC	INTRAGROUP EMTN 1 TR/FS	€ (6)	Fixed	2020	250,000	249,701	250,000	249,204
HS/HC	INTRAGROUP EMTN 2 TR/FS	€ (6)	Fixed	2021	500,000	499,156	500,000	498,748
HS/HC	INTRAGROUP EMTN 6 TR/FS	€ (6)	Fixed	2025	300,000	299,286	300,000	299,163
HS/HC	INTRAGROUP EMTN 9 TR/FS	€ (6)	Variable	2030	200,000	200,000	200,000	200,000
HS/HC	INTRAGROUP EMTN 11 TR/FS	€ (6)	Variable	2029	100,000	99,816		
HS/HC	INTRAGROUP EMTN 12 TR/FS	€ (6)	Variable	2029	140,000	140,000		
					1,590,000	1,587,960	1,400,000	1,397,115
TOTAL					3,265,925	3,263,885	3,525,702	3,522,816

(1) The rate was converted from variable to fixed following a swap hedging the interest rate risk.
(2) Fixed for each tranche used.
(3) Fixed for the first three tranches, variable for the subsequent ones.
(4) Amount factored by Cassa Depositi e Prestiti to CPG Società di cartolarizzazione a.r.l. as part of a factoring transaction carried out in accordance with Law no. 130/1999
(5) Amount subject to interest rate risk hedging transactions (collars)
(6) Fees will guarantee financial coverage

The EIB 300 loan includes covenants in line with international practice which require compliance with a number of financial parameters throughout the term of the contract.

Specifically, these parameters refer to:

- the debt/equity ratio which should remain below 30%;
- equity which should be equal to at least €26 billion;
- total assets which should be equal to at least €36.5 billion.

To date, all financial covenants have been complied with.

The table below shows net financial debt at 31 December 2019 compared with that at the previous year end. It worsened by €1,334,462 thousand following the €1,232,257 thousand increase in current net financial debt and the €102,206 thousand increase in net non-current financial debt.

	(€'000)		
	31.12.2019	31.12.2018	Changes
Net current financial (position) debt	523,924	(708,333)	1,232,257
Treasury current accounts	(536,600)	(716,445)	179,845
Other financial assets	(99,432)	(90,663)	(8,769)
Financial assets from the MEF for the fifteen-year grants	(589,901)	(582,443)	(7,458)
Bank loans and borrowings	199,901	196,476	3,425
Loans and borrowings from other financial backers	30,057	29,130	927
Loans and borrowings from group companies	1,510,238	458,654	1,051,585
Lease liabilities due within one year (IFRS 16)	13,032	-	13,032
Other	(3,371)	(3,041)	(329)
Net non-current financial debt	1,961,294	1,859,089	102,206
Financial assets from the MEF for the fifteen-year grants	(488,741)	(1,078,594)	589,853
Loans	(86,654)	(85,357)	(1,297)
Bank loans and borrowings	999,965	1,195,444	(195,479)
Loans and borrowings from other financial backers	56,036	86,094	(30,058)
Loans and borrowings from group companies	1,441,188	1,741,502	(300,314)
Lease liabilities due after one year (IFRS 16)	39,500	-	39,500
Total	2,485,218	1,150,755	1,334,462

The following table shows changes in financial items, indicated separately from those that generated/used cash flows.

	31.12.18	Non-monetary items							31.12.19
		Monetary items	Change accruals	Other Non-monetary changes	Change in leases (IFRS 16)	Change in fair value (IFRS 13)	Change in time value (IFRS 13)	Change in expected credit loss (IFRS 9)	
Disbursement/repayment of loans and borr.	3,707,300	530,034	(982)	1,034	-	-	-	-	4,237,386
Change in financial assets	(1,746,394)	598,504	201	-	-	(17,111)	-	(496)	(1,165,296)
Change in financial liabilities (Hedges)	18,860	(13,065)	(44)	-	65,702	(3,874)	(2)	-	67,577

20. Post-employment and other employee benefits (CLC)

	(€'000)	
	31.12.2019	31.12.2018
Present value of post-employment benefit obligations	480,510	567,084
Present value of CLC obligations	33,615	27,772
Other provisions (health care trust, former National Social Security and Welfare Institute for Ferrovie dello Stato employees)	(162)	(151)
Other changes (advance on Italian revaluation tax)	-	30
Total present value of obligations	513,963	594,735

Changes in the present value of liabilities for defined benefit obligations are shown in the table below.

	(€'000)	
Post-employment benefits and Free Travel Card	31.12.2019	31.12.2018
Defined benefit obligations at 1 January	594,856	673,695
Service cost	182	165
Interest cost (*)	2,945	3,746
Benefits paid	(94,722)	(71,998)
Transfers in (out)	1,731	1,294
Other changes (estimated benefit payments)	(2,388)	(2,397)
Actuarial (gains) losses recognised in equity	11,521	(9,649)
Defined benefit obligations	514,125	594,856
Other provisions (health care trust, former National Social Security and Welfare Institute for Ferrovie dello Stato employees)	(162)	(151)
Other changes		30
Post-employment and other employee benefits (CLC)	513,963	594,735

(*) through profit or loss

In accordance with the IFRS, the post-employment benefits accrued up to 1 January 2007 and the Free Travel Cards have been considered defined post-employment-benefits, the amount of which is calculated on an actuarial basis in accordance with the relevant standards.

In 2019, a total of €95,379 thousand in post-employment benefits was used (benefits paid, transfers in/out, other changes, estimated benefit payments). This refers to the benefits paid to employees who left the company in 2019 and employees' advances and transfers from/to other group companies.

In 2019, actuarial losses total €11,521 thousand compared to actuarial gains of €9,649 thousand in 2018. The actuarial losses are due to the considerable decrease in the discount rate from 0.77% in 2018 to 0.17% in 2019 and from 1.57% in 2018 to 0.77% in 2019 for post-employment benefits and the CLC, respectively.

Specifically, the actuarial reports on TFR and the CLC show total losses based on financial assumptions (including the discount rate) of approximately €17,258 thousand and gains on residual actuarial assumptions of roughly €5,737 thousand, which, summed together, generate total actuarial losses of €11,521 thousand.

Other provisions include negligible amounts which were not subject to actuarial valuation since they did not meet the requirements of defined benefit obligations set out in IAS 19. Consequently, they were presented separately.

Actuarial assumptions

The main assumptions for the actuarial estimate process are described below:

	31.12.2019	31.12.2018
Discount rate (TFR)	0.17%	0.77%
Discount rate (CLC)	0.77%	1.57%
Future increases in pensions	75% inflation +1.5 percentage points	75% inflation +1.5 percentage points
<i>Expected turnover rate for employees</i>	4.00%	4.00%
Expected rate of advances	2.00%	2.00%
Probability of death	RG48 mortality rate published by the General Accounting Office	RG48 mortality rate published by the General Accounting Office

The expected mortality assumptions are based on published statistics and mortality rates.

The following sensitivity analysis shows the effects that would have been recorded in terms of changes in the present value of liabilities for defined benefit obligations, following reasonably possible changes in actuarial assumptions. The tables below show the contribution expected for the subsequent year, the average term of the defined benefit obligation and the payments scheduled by the plan.

SENSITIVITY ANALYSIS OF TFR AND CLC	(€'000)	
31.12.2019	TFR	CLC
Turnover rate +1.00%	478,026,738	
Turnover rate -1.00%	483,246,112	
Inflation rate +0.25%	484,581,635	34,101,010
Inflation rate -0.25%	476,501,076	33,144,815
Discount rate +0.25%	474,174,159	32,842,214
Discount rate -0.25%	487,046,017	34,421,298
Future service cost	–	219,406
Plan duration (years)	6	9
Total employees at year end		

Estimated future TFR and CLC	(€'000)	
31.12.2019	TFR	CLC
Payment - first year	143,220,669	2,957,793
Payment - second year	57,550,212	2,789,416
Payment - third year	18,341,268	2,630,438
Payment - fourth year	28,890,958	2,482,878
Payment - fifth year	33,347,310	2,339,614

21. Provisions for risks and charges

The opening and the closing balances of the provisions for risks and charges and changes in 2019 are shown below. The provisions are deemed adequate to cover the company's probable charges.

						(€'000)
	31.12.2018	Merger	Accrual	Utilisations	Release of excess provisions	31.12.2019
Provision for taxation	20,137		700	(450)	(139)	20,248
Other	504,765		72,984	(101,888)	(22,395)	453,466
TOTAL	524,902	–	73,684	(102,338)	(22,534)	473,714

Provision for taxation

It includes probable future tax charges.

At 31 December 2019, this provision is essentially in line with the previous year end.

Reference should be made to the directors' report section Tax disputes for additional information about pending tax disputes.

Other provisions

This caption refers to the following items which changes as follows:

						(€'000)
	31.12.2018	Merger	Accrual	Utilisations	Release of excess provisions	31.12.2019
Expense related to						
- personnel	47,767		14,668	(16,786)		45,649
- third parties	233,703		17,632	(17,647)	(6)	233,682
Reclamation	51,114			(1,756)		49,358
Equity investments	48,882					48,882
Other provisions for risks and charges	123,299		40,684	(65,699)	(22,389)	75,895
TOTAL	504,765	–	72,984	(101,888)	(22,395)	453,466

Provisions for expense related to personnel and third parties

This provision comprises the probable charges in respect of economic and labour claims and compensation for occupational illness. It refers to pending disputes brought before the competent labour courts.

In 2019, €16,786 thousand was used to cover the contribution charges and costs related to disputes with personnel (in court or out of court). It was increased by €14,668 thousand to meet the needs calculated at 31 December 2019.

The provision for expense related to third parties mainly refers to lawsuits pending with suppliers for subcontracting, services and supplies and the out-of-court dispute for suppliers' claims.

In 2019, €17,647 thousand was used following the unfavourable settlement of disputes, while €17,632 thousand was accrued in respect of pending disputes.

With respect to pending judicial investigations and criminal court proceedings, as there are no indications that the company may be exposed to significant liabilities, no accruals were recognised.

Reclamation provision

This provision was accrued and used to cover the costs incurred to reclaim sites polluted by works to be sold/that have been sold. The initial calculation of this provision considered the costs to restore the affected areas based on their previous industrial use.

Provision for equity investments

This provision was accrued at 31 December 2013 to cover the investment in Stretto di Messina S.p.A. in liquidation. It was unchanged in 2019.

Provisions for other risks and charges

These provisions were accrued for other risks and charges, including for income and employment assistance, leaving incentives, the performance regime and insurance compensation.

During the year, €53,365 thousand was used from the provision for income and employment assistance and €12,178 thousand was released for liabilities that were previously over-estimated.

22. Non-current and current liabilities (including derivatives)

	(€'000)								
	Carrying amount								
	31.12.2019			31.12.2018			Change		
	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total
Financial liabilities									
Hedging derivatives	14,071	611	14,682	17,948	655	18,603	(3,877)	(44)	(3,921)
Other financial liabilities	–	363	363	–	257	257	–	106	106
Lease liabilities	39,500	13,032	52,532	–	–	–	39,500	13,032	52,532
Total	53,571	14,006	67,577	17,948	912	18,860	35,623	13,094	48,717

The €48,717 thousand increase in financial liabilities (non-current and current) mainly reflects the recognition of lease liabilities in accordance with IFRS 16, calculated at the present value of the residual payments.

The €3,877 thousand decrease in the non-current portion of hedging derivatives is due to the fair value measurement of derivatives at 31 December 2019 (2019 - 2018 FV difference). Specifically, the effect is due to:

- the increase in the hedging reserve (€3,874 thousand), due to the fair value measurement of swaps, forward rate agreements and the intrinsic value of collars;
- the positive impact of the time value of collars on profit or loss (€3 thousand).

The current portion mainly reflects the carrying amount of the accruals related to derivatives.

Financial liabilities measured at fair value are comprised of hedging derivatives and are measured at Level 2, as described in paragraph 17 Financial risk management to which reference should be made. Paragraph 17 also provides a definition of the hierarchy levels within the fair value estimate.

Extension/termination options

Property leases include extension/termination options. At the commencement date of a lease, the company assesses whether it is reasonably certain to exercise that option and reassesses them whenever a significant event or significant change in circumstances under its control occurs.

Based on this analysis, RFI concluded that it was reasonably certain that the lease of Villa Patrizi would be extended.

The table below shows potential future payments:

Recognised lease liabilities	Potential future lease payments	Rate at which lease extension/termination options have been exercised in the past
52,532	31,936	50%

23. Other non-current and current liabilities

This caption can be analysed as follows:

	31.12.2019			31.12.2018			Change		
	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total
Advances for grants	–	2,731,347	2,731,347	–	3,493,006	3,493,006	–	(761,659)	(761,659)
Advances to customers	–	–	–	–	–	–	–	–	–
Social security charges payable	30,127	101,714	131,841	36,152	97,798	133,950	(6,025)	3,916	(2,109)
Other liabilities with group companies	196	80,282	80,478	227	19,658	19,885	(31)	60,624	60,593
Other liabilities	92,399	352,419	444,818	72,560	374,483	447,043	19,839	(22,064)	(2,225)
Accrued expenses and deferred income	157	16,387	16,544	2,539	16,872	19,411	(2,382)	(485)	(2,867)
Total	122,879	3,282,149	3,405,028	111,478	4,001,817	4,113,295	11,401	(719,668)	(708,267)

At 31 December 2019, advances for grants related to assets amount to €2,731,347 thousand and can be analysed as follows:

	(€'000)				
	31.12.2018	Increases	Decreases	Other changes	31.12.2019
Advances for grants:					
Ministry of the Economy and Finance	1,212,906	2,949,229	(3,624,536)	154,278	691,878
Ministry of Infrastructure and Transport	1,676,158	40,990	(187,171)		1,529,977
European Regional Development Fund	125,036	137,302	(113,732)	(99,435)	49,171
Trans-European network	186,882	12,164	(9,097)	(167,187)	22,762
Other PA	287,759	334,878	(189,158)		433,479
Other third parties	4,265		(185)		4,080
Total	3,493,006	3,474,563	(4,123,878)	(112,344)	2,731,347

The €761,659 thousand net decrease in advances is due to the combined effect of the increases in amounts due from the MIT, the MEF and other bodies which were recognised under Other current and non-current assets and Non-current and current financial assets, the decreases due to uses through the allocation to assets under construction and the coverage of financial expense, and the €112,344 thousand net decrease included under Other changes reflecting the capital increases of Società Tunnel Ferroviario del Brennero S.p.A. as described in the note to Equity investments to which reference should be made.

Furthermore, during the year, €266,622 thousand was reclassified from advances for grants related to assets from the European Regional Development Fund (ERDF) and the Trans-European network (TEN) community funds to advances from the MEF. This reclassification was part of the process for optimising the allocation of funds to investment projects in order to take into account consequent changes in the source of funding.

Other current liabilities with group companies amounting to €80,282 thousand increased by €60,624 thousand on 31 December 2018 mainly as a result of the recognition of the liability for the 2019 grants related to goods of €54,230 thousand and the €6,500 thousand decrease in liabilities related to the performance regime.

Other current liabilities mainly refer to amounts due to personnel (€119,947 thousand), guarantee deposits (€40,634 thousand), holidays accrued but not taken (€30,970 thousand), fund for income and employment assistance (€17,970 thousand), other tax liabilities for withholdings applied by RFI on employees' and contract workers' remuneration (€40,248 thousand), advances for grants related to goods (€20,000 thousand) and amounts due to railway companies for the grants related to goods (€45,601 thousand).

At 31 December 2019, accrued expenses and deferred income totalling €16,544 thousand decreased by €2,867 thousand mainly as a consequence of lower commercial deferred income relating to properties.

24. Current and non-current trade payables

They can be analysed as follows:

	(€'000)								
	31.12.2019			31.12.2018			Change		
	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total
Trade payables	12,553	2,528,337	2,540,890	12,776	2,621,403	2,634,179	(223)	(93,066)	(93,289)
Advances	6,129	55,620	61,749	5,946	57,318	63,264	183	(1,698)	(1,515)
Trade payables to group companies	–	585,365	585,365	–	512,570	512,570	–	72,795	72,795
Contract liabilities	–	11,586	11,586	–	8,637	8,637	–	2,949	2,949
Total	18,682	3,180,908	3,199,590	18,722	3,199,928	3,218,650	(40)	(19,020)	(19,060)

Current trade payables decreased by €93,289 thousand on 31 December 2018. This reduction is mainly due to the payments made during the year, mainly in connection with investments.

Current and non-current advances refer to ordinary customers and group companies (€55,620 thousand), slightly down by €1,698 thousand on 31 December 2018.

Current trade payables to group companies increased by a net €72,795 thousand mainly due to the combined effect of the following factors:

- the €2,429 thousand decrease in liabilities with the parent;
- the €1,007 thousand increase in liabilities with subsidiaries (mainly GS Rail S.p.A);
- the €14,669 thousand decrease in invoices to be received from related companies;
- the €43,689 thousand increase in liabilities with the related company Fercredit following factoring by third-party and group suppliers;

-
- the €44,438 thousand increase in invoices received from related companies, mainly Italferr S.p.A., Mercitalia Rail S.p.A. and the newco FSTechnology S.p.A..

Contract liabilities of €11,586 thousand reflect the gross amount due to customers for contracts the costs of which, net of recognised profit margins, exceed progress payments. This caption corresponds with Contract assets, to which reference should be made.

NOTES TO THE INCOME STATEMENT

25. Revenue from sales and services

The tables and comments below give a breakdown of revenue from sales and services.

	(€'000)		
	2019	2018	Change
Revenue from transport services	–	–	–
Revenue from infrastructure services	1,194,648	1,185,280	9,368
✓ <i>Service concessions</i>	2,500	–	2,500
✓ <i>Fees</i>	1,182,105	1,175,396	6,709
✓ <i>Ferry services</i>	10,043	9,884	159
Other service revenue	308,650	331,912	(23,262)
Revenue from traffic-related services	203,658	222,722	(19,064)
Sundry service revenue	57,121	57,562	(441)
✓ <i>Health services</i>	39,553	40,570	(1,017)
✓ <i>GSM-R revenue</i>	3,387	3,967	(580)
✓ <i>Other sundry revenue</i>	14,181	13,025	1,156
Processing for third parties	42,985	46,263	(3,278)
Sale of materials	4,886	5,365	(479)
Revenue from contracts with customers	1,503,298	1,517,192	(13,894)
Sundry revenue	1,033,152	1,004,195	28,957
✓ <i>Government grants</i>	1,022,656	1,015,557	7,099
✓ <i>EU grants</i>	238	671	(433)
✓ <i>Freight and other accruals or releases</i>	10,258	(12,033)	22,291
Revenue from property management	113,746	111,920	1,826
✓ <i>Leases</i>	94,892	97,004	(2,112)
✓ <i>Recharging of building expense and IRE tax</i>	14,243	10,114	4,129
✓ <i>Sale of advertising spaces</i>	4,611	4,802	(191)
Other revenue from sales and services	1,146,898	1,116,115	30,783
Total revenue from sales and services	2,650,196	2,633,307	16,889

Revenue from infrastructure services increased by €9,368 thousand, due to the following factors:

- the increase in fee revenue (€6,709 thousand), mainly due to the change in traffic volumes in terms of train/km and the impact of the changes to the tariff system approved with ART decision no. 43/2019. For additional information, reference should be made to the paragraph on Customer relations in the directors' report;
- the increase in revenue from service concessions (€2,500 thousand) related to invoices to the Umbria region following the merger of UMFERRO into RFI;
- the slight increase in revenue from ferry services (€159 thousand).

Other service revenue decreased by €23,262 thousand due to the combined effect of the following factors:

- the €19,064 thousand decrease in revenue from traffic-related services due to:
 - ✓ the €20,545 thousand decrease in revenue from the sale of electrical energy for traction as a consequence of the drop in energy prices in 2019;
 - ✓ the €2,077 thousand increase in revenue from transport-related services mainly due to the rise in revenue from assistance services to passengers with reduced mobility (PRM) (€387 thousand) and revenue from auxiliary services (€1,293 thousand);

- ✓ the €964 thousand decrease in shunting services, substantially due to the reduction in shunting services at passes, as part of the process to progressively have the railway companies handle shunting on their own;
 - ✓ the €123 thousand increase in revenue from connecting tracks and the €245 thousand increase in revenue from the management of freight terminals;
- the €3,278 thousand reduction in revenue from processing for third parties essentially due to the slowdown of work at the Palermo Metroferrovia which caused a decrease in the related costs;
 - the €479 thousand decrease in revenue from the sale of materials, specifically spare and sundry materials;
 - the €441 thousand decrease in sundry service revenue mainly due to the combined effect of the reduction in revenue from health services (€1,017 thousand) and GSM-R services (€580 thousand), partly offset by the increase in sundry revenue (€1,156 thousand).

Sundry revenue rose by €28,957 thousand mainly as a consequence of the combined effect of the following factors:

- the €7,099 thousand increase in grants under the Government Programme Contract;
- the €22,239 thousand increase as a result of the combined effect of the 2018 accruals and the 2019 releases;
- the €433 thousand decrease in EU grants.

Revenue from property management rose by €1,826 thousand as a result of the following changes:

- ✓ the €2,112 thousand decrease in lease payments mainly due to the reduction in revenue from level crossings and special access (€1,853 thousand) and the effects of the merger of Centostazioni S.p.A. which generated an increase in lease payments (€7,893 thousand) and a decrease in fees to use property (€7,654 thousand);
- ✓ the €4,129 thousand increase in revenue from the recharging of building expense essentially due to the recharging of the registration tax;
- ✓ the €191 thousand decrease in revenue from the sale of advertising spaces.

Revenue from contracts with customers may be analysed as follows:

	(€'000)	
	2019	2018
Italy	1,498,782	1,513,303
EU	2,909	2,636
Non-EU	1,607	1,253
Total revenue from contracts with customers	1,503,298	1,517,192
Product lines/services*		
Revenue from infrastructure services	1,194,648	1,185,280
Revenue from traffic-related services	203,658	223,860
Sundry service revenue	57,121	56,424
Processing for third parties	42,985	46,263
Sale of materials	4,886	5,365
Total revenue from contracts with customers	1,503,298	1,517,192
Moment of recognition		
At a point in time	44,499	45,991
Over time	1,458,799	1,471,201
Total revenue from contracts with customers	1,503,298	1,517,192

With respect to the services listed above, the company has a single-segment structure.

The table below provides information about contract assets and liabilities:

	(€'000)	
	31.12.2019	31.12.2018
Contract assets classified under current/non-current trade receivables	322,290	325,245
Contract assets	121,109	137,732
Contract liabilities	(11,586)	(8,637)

Contract assets and invoices to be issued are gross of the loss allowance.

The table below shows the significant changes in contract assets and liabilities for the year:

	(€'000)	
	Contract assets	Contract liabilities
Increase in contract liabilities net of amounts recognised under revenue during the year		(2,949)
Reclassifications from contract assets recognised at the beginning of the year	(75,453)	
Increases in contract assets due to the provision of services	58,830	
Change in assets / liabilities	(16,623)	(2,949)

Other revenue from sales and services

This caption includes lease and sub-lease income amounting to €113,746 thousand.

The table below includes an ageing analysis of payments to be received in future years for assets that the company has given under operating lease:

(€'000)

	Within one year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	After five years	TOTAL
Undiscounted payments to be received for operating leases	114,957	116,181	117,418	118,669	119,932	121,209	708,366

26. Other income

This caption can be analysed as follows:

(€'000)

	2019	2018	Change
Other sundry income			
Income and sundry services	79,564	95,988	(16,424)
Gains	69,597	61,184	8,413
Total	149,161	157,172	(8,011)

The €8,011 thousand decrease in Other sundry income is due to the combined effect of:

- the €16,424 thousand decrease in sundry services mainly due to:
 - ✓ the €5,202 rise in other sundry income following the forfeiture of the surety issued by Astaldi S.p.A.;
 - ✓ the €422 thousand increase in revenue from cleaning services and the €624 thousand rise in revenue from testing;
 - ✓ the €84 thousand increase in revenue from reimbursements from personnel;
 - ✓ the €6,569 thousand decrease in revenue from other penalties;
 - ✓ the €6,083 thousand decrease in penalties for the performance regime;
 - ✓ the €6,456 thousand decrease in revenue from insurance compensation;
 - ✓ the €3,592 thousand decrease in revenue from sundry services;
- the €8,413 thousand increase in gains from the sale of property (€1,288 thousand) and in ordinary gains (€7,125 thousand).

27. Personnel expense

This caption can be analysed as follows:

	(€'000)		
	2019	2018	Change
Employees	1,485,623	1,465,437	20,186
✓ <i>Wages and salaries</i>	1,103,847	1,080,578	23,269
✓ <i>Social security contributions</i>	297,311	303,855	(6,544)
✓ <i>Other expense for employees</i>	(1,266)	(1,021)	(245)
✓ <i>Post-employment benefits</i>	71,730	71,625	105
✓ <i>Accruals/releases</i>	14,001	10,400	3,601
Consultants and contract workers	98	106	(8)
✓ <i>Wages and salaries</i>	66	74	(8)
✓ <i>Social security contributions</i>	32	32	–
Other costs	34,703	31,892	2,811
✓ <i>Temporary workers/Seconded personnel and trainees</i>	4,223	3,579	644
✓ <i>Other costs</i>	30,480	28,313	2,167
Total	1,520,424	1,497,435	22,989

Personnel expense increased by €22,989 thousand on 2018, mainly due to the rise in the cost of employees (€20,186 thousand) and the growth in other costs (€2,811 thousand), partly offset by lower costs for consultants and contract workers (€8 thousand).

The average workforce of the years is as follows:

Average	2019	2018	Change
Managers	246	230	16
Junior managers	5,615	5,794	(179)
Other	20,466	20,018	448
TOTAL	26,327	26,042	285

28. Raw materials, consumables, supplies and goods

They can be analysed as follows:

	(€'000)		
	2019	2018	Change
Raw materials and consumables	678,804	793,774	(114,970)
Electrical energy and fuel for traction	152,225	169,405	(17,180)
Lighting and driving force	55,322	47,385	7,937
Provisions/releases	2,739	(191)	2,930
Total	889,090	1,010,373	(121,283)

The total decrease of €121,283 thousand in raw materials, consumables, supplies and goods is mainly due to the combined effect of the following factors:

- the €79,457 thousand decrease in consumption of materials due to:
 - the €88,968 thousand reduction in materials used for investments;
 - the €9,511 thousand increase in grants used for operations;
- the €1,172 thousand increase in the purchase price of inventories;
- the €618 thousand increase in the purchase costs for consumables;

- the €37,303 million increase in revenue from internal work, due to an increase in production of frogs, switches, glued insulating joints and devices by Officina Nazionale Infrastrutture e Apparecchiature Elettriche (the Bari, Pontassieve and Bologna national workshops);
- the €17,180 thousand decrease in electrical energy and fuel costs for train traction due to the drop in energy prices in 2019;
- the €7,937 thousand increase in costs for lighting and driving force;
- the €2,930 thousand increase in accruals to the allowance for inventory write-down, following the analysis carried out of obsolete and slow-moving items to be written down or off.

29. Services

This caption can be analysed as follows:

	(€'000)		
	2019	2018	Change
Transport services	16,548	9,801	6,747
Other transport-related services	(26)	(64)	38
Shunting services	559	512	47
Ferry services	10,799	5,021	5,778
Freight transport services	5,216	4,332	884
Maintenance, cleaning and other contracted services	390,525	370,676	19,849
Contracted services and work on behalf of third parties	23,926	32,890	(8,964)
Contracted cleaning and other services	108,582	98,971	9,611
Maintenance and repair of immovable and movable property	258,017	238,815	19,202
Maintenance accruals and releases	-	-	-
Property services and utilities	102,961	113,852	(10,891)
Administrative and IT services	78,304	80,146	(1,842)
External communications and advertising expense	982	1,590	(608)
Other sundry services	155,024	119,438	35,586
✓ Consultancies	382	750	(368)
✓ Insurance	7,938	7,227	711
✓ Professional services	8,961	8,750	211
✓ Agencies' fees	3	1	2
✓ Group common costs	2,111	1,982	129
✓ Other	118,003	108,054	9,949
✓ Accruals/releases	17,626	(7,326)	24,952
Total	744,344	695,503	48,841

Costs for services increased by €48,841 thousand on 2018, mainly as a consequence of the combined effect of the following factors:

- the €8,964 thousand decrease in costs for contracted services and work on behalf of third parties due to the slowdown of work at the Palermo Metroferrovia;
- the €5,778 thousand increase in ferry services (high-speed boats) on the Messina – Reggio Calabria and Villa San Giovanni – Messina routes provided by Blujet S.r.l.;
- the €9,611 thousand increase in contracted cleaning and other services due to the €12,923 thousand rise in contracted cleaning services, partly offset by the €1,842 thousand decrease in upkeep costs and the €1,426 thousand reduction in plant cleaning costs;
- the €19,202 thousand increase in costs for maintenance and repair of movable and immovable property related to: non-recurring maintenance of property (€6,659 thousand), building maintenance (€11,834

thousand), line maintenance (€6,351 thousand), offset, in part, by the €5,654 thousand decrease in costs for maintenance of movable property;

- the €10,891 thousand decrease in property services and utilities mainly due to the reduction in building expense following the merger of Centostazioni (€9,543 thousand) and the €1,181 thousand drop in utility costs;
- the €1,842 thousand decrease in costs for administrative and IT services due to the combined effect of the €3,674 thousand reduction in administrative services, partly offset by the €1,832 thousand increase in costs for IT services;
- the €35,586 thousand increase in costs for other sundry services mainly due to the €17,247 thousand rise in accruals and the €7,705 thousand decrease in releases for a total of €24,952 thousand, the €12,093 thousand increase in infrastructure clearance costs, partly offset by the €368 thousand reduction in consultancy costs, the €529 thousand decrease in testing costs and the €741 thousand reduction in other third party services.

30. Use of third-party assets

This caption can be analysed as follows:

	(€'000)		
	2019	2018	Change
Lease payments, building expense and IRE (registration tax)	25,893	40,831	(14,939)
Leases and indemnities for rolling stock and other	5,616	2,653	2,963
IT and other services	1,116	10,237	(9,121)
Total	32,625	53,721	(21,096)

Use of third-party assets decreased by €21,096 thousand, mainly due to the combined effect of the following factors:

- the €14,939 thousand decrease in lease payments due to the application of IFRS 16 (€13,170 thousand);
- the €2,963 thousand increase in leases and indemnities for rolling stock and other;
- the €9,121 thousand decrease in costs for IT and other services due to the reduction in trademark licensing fees.

31. Other operating costs

This caption can be analysed as follows:

	(€'000)		
	2019	2018	Change
Other costs	123,118	132,375	(9,257)
Losses	426	2,091	(1,665)
Accruals/Releases	1,026	3,068	(2,042)
Total	124,570	137,534	(12,964)

Other operating costs decreased by €12,964 thousand mainly as a consequence of the combined effect of the following changes:

- the €16,306 thousand decrease in costs related to the Free Travel Cards;
- the €2,038 thousand increase in contract penalties;

- the €2,042 thousand decrease in accruals/releases as the net effect of the rise in prior year accruals then released in 2019 and in accruals for the performance regime.

32. Internal work capitalised

This caption amounts to €992,525 thousand and refers to internal costs for the use of personnel and overheads of €360,319 thousand and costs for materials used in investments of €632,206 thousand.

The €60,518 thousand decrease on 2018 is mainly due to the reduction in the use of materials.

33. Amortisation and depreciation

This caption can be analysed as follows:

	(€'000)		
	2019	2018	Change
Amortisation of intangible assets	3,806	3,955	(149)
Depreciation of property, plant and equipment	112,564	100,388	12,176
Depreciation of investment property	2,369	1,686	683
Total	118,739	106,029	12,710

Depreciation of property, plant and equipment increased by €12,710 thousand, mainly due to the application of IFRS 16 which generated depreciation of €12,588 thousand.

34. Impairment losses

This caption can be analysed as follows:

	(€'000)		
	2019	2018	Change
Net impairment losses on intangible assets	6	–	6
Net impairment losses on property, plant and equipment	16,853	4,027	12,826
Net impairment losses on loans and receivables	6,961	1,372	5,589
Net fair value gains on cash and cash equivalents	(155)	(337)	182
Total	23,665	5,062	18,603

Net impairment losses increased by €18,603 thousand on 2018, mainly due to:

- the €12,826 thousand increase in impairment losses on property, plant and equipment mainly due to the combined effect of the €16,027 thousand in impairment losses on investment property, offset by the decrease in impairment losses on ferry boats (€2,282 thousand), plant and machinery (€553 thousand) and assets under construction (€366 thousand);
- the €5,589 thousand increase in net impairment losses on loans and receivables due to the application of IFRS 9 (gains of €3,411 thousand), offset by impairment losses for the year (€8,857 thousand).

35. Provisions

This caption rose by €38,178 thousand as result of the combined effect of the provisions recognised in 2018 (€26,000 thousand) and the releases made in 2019 (€12,178 thousand) concerning the extraordinary solidarity benefits under the fund for income and employment assistance.

36. Financial income

This caption can be analysed as follows:

	(€'000)		
	2019	2018	Change
Other financial income	6,772	545	6,227
Exchange gains	1,596	172	1,424
Dividends	145	–	145
Total	8,513	717	7,796

In 2019, this caption rose by €7,796 thousand on the previous year mainly as a result of the gain on the sale of the investment in CS Retail S.p.A. (€6,245 thousand) and the increase in exchange gains (€1,424 thousand).

37. Financial expense

This caption can be analysed as follows:

	(€'000)		
	2019	2018	Change
Borrowing costs	40,542	38,774	1,768
Impairment losses on financial assets	(494)	(503)	9
Exchange losses	2,011	116	1,895
Financial expense on lease liabilities	856	–	856
Accruals/releases	–	–	–
Total	42,915	38,387	4,528

Financial expense increased by €4,528 thousand, mainly due to the following factors:

- the €1,768 thousand increase in financial expense due to the combined effect of the rise in interest and other expense to others (€1,886 thousand), the parent (€992 thousand) and other group companies (€128 thousand) and the reduction in the interest cost of post-employment benefits (€1,340 thousand);
- the €856 thousand increase in financial expense on lease liabilities due to the application of IFRS 16;
- the €1,895 thousand increase in exchange losses.

38. Capitalised financial expense

It was calculated based on the portion of financing allocated to assets under construction and amounts to €16,814 thousand.

39. Current and deferred taxes

The €14,268 thousand increase is due to the adjustments of the regional tax on productive activities (IRAP) following the settlement of the dispute with the tax authorities for the 2010-2014 period, concerning the undue deduction - in the calculation of the IRAP tax - of grants related to income that RFI paid to Trenitalia for the free transport of Free Travel Card holders.

The following table provides a breakdown of the depreciable cost used for tax purposes which, following the application of the specific IFRS-compliant provisions set out in article 1.86 and 87 of Law no. 266/2005, is shown gross of the corresponding government grants related to assets to the railway infrastructure operator.

	(€'000)
	2019
Depreciable cost under Italian Civil Code criteria	4,886,840
Government grants related to assets up to 2019	44,027,903
Government grants related to assets for 2019 extraordinary maintenance	3,560,344
Government grants related to assets up to 2060	40,153,921
Impairment loss as per IFRS, reducing the historical cost	3,580,321
Total depreciable cost under tax criteria	96,209,330
Total fiscally-driven portion	2,155,966

40. CONTINGENT ASSETS AND LIABILITIES

Contingent liabilities mainly relate to the disputes underway described in the Litigation and disputes section of the Directors' report to which reference should be made for additional details.

The company's main contingent assets and liabilities are reported below.

RFI - Gruppo COSIAC S.p.A.

In 2011, Gruppo COSIAC S.p.A. brought a legal action before the Rome Civil Court claiming compensation for damage (roughly €1.039 billion) following the alleged violation of rules of integrity, impartiality and good faith in the performance of the integrated service concession for the laying of double tracks on the Tommaso Natale – Carini railway line, and the connection to the Punta Raisi airport. With ruling no. 9769/2015, the Rome Court, admitting all RFI S.p.A.'s arguments and ordering COSIAC S.p.A. to pay all legal fees, declared that it did not have jurisdiction, while the administrative judge did, and denied all claims of liability (contractual, pre-contractual and non-contractual). COSIAC S.p.A. appealed against the ruling. With ruling no. 1.477 of 1 March 2019, the Rome Court of Appeal partially admitted COSIAC S.p.A.'s appeal and transferred the case to the Court, recognising the ordinary judge's jurisdiction on the assumption that COSIAC S.p.A. claim in the case was an expression of its subjective right arising from a contract subject to private law. RFI S.p.A. appealed against this ruling before the Court of Cassation and requested its revocation before the Court of Appeal, as it was in contrast with the cases already pending in civil and administrative court, including with respect to jurisdiction. With summons notified on 3 May 2019, COSIAC S.p.A. reinstated the case before the Rome Civil Court: the preliminary hearing (originally scheduled for 20 September 2019) was set by the Court on 5 March 2020. RFI S.p.A. appeared

in court and requested a stay of the proceedings pending the decisions of the Court of Cassation and the Court of Appeal for revocation on the matters of jurisdiction and conflicting cases.

Council of State ruling no. 6108/2019 partially cancelling ART decision no. 70/2014

With ruling no. 6108 of 9 September 2019, the Council of State admitted RFI S.p.A.'s appeal against the Piedmont Regional Administrative Court's ruling no. 541/2017 and cancelled the section of ART decision no. 70/2014 in which the provisions applicable to the fees to access the infrastructure - as they did not adequately consider the operator's right to the full remuneration of the invested capital - prevented it from fully recovering the costs during the validity of the above decision.

As part of the above ruling before the Council of State, RFI S.p.A. filed a document quantifying the amount not recovered for the period of validity of Decision no. 70/2014 (6 November 2014-31 December 2015) as €101 million or €140 million, depending on the calculation method used to determine the cost item of the return on invested capital.

This ruling highlighted the retroactive nature of the cancellation of ART decision no. 70/2014 and required ART to "renew the [preliminary] proceedings for the period [...] from 6 November 2014 to 31 December 2015" in order to "fill the regulatory void caused by the aforementioned cancellation [...]".

ART took two separate legal actions against this ruling, which consisted of (i) an appeal for revocation to the Council of State, with an application for injunction, brought as an incidental action in the main proceedings brought by the railway company Italo Nuovo Trasporto Viaggiatori S.p.A. and (ii) a further independent appeal before the Supreme Court of Cassation.

The proceedings are currently pending.

41. AUDIT FEES

Pursuant to article 37.16 of Legislative decree no. 39/2010 and letter 16-bis of article 2427 of the Italian Civil Code, it is noted that the total fees due to the independent auditors and its network amount to €559 thousand and include the fees paid for services other than the statutory audit (approximately €246 thousand).

42. DIRECTORS' AND STATUTORY AUDITORS' FEES

The following fees were paid to directors and statutory auditors for the performance of their duties, as per the relevant resolutions.

	(€'000)		
	2019	2018	Changes
Directors *	303	303	–
Statutory auditors	84	84	–
Total	387	387	–

* In addition, fees of €45 thousand were paid to the non-group members of the Supervisory body.

43. MANAGEMENT AND COORDINATION

The key figures of the direct parent at 31 December 2018 are available on the company's website www.fsitaliane.it and at the head office of Ferrovie dello Stato Italiane.

	€'000	
	31.12.2018	31.12.2017
Assets		
Total non-current assets	44,848,061	42,774,571
Total current assets	3,894,254	4,661,967
Assets held for sale and disposal groups	22,395	
Total assets	48,764,710	47,436,538
Equity		
Share capital	39,204,174	36,340,433
Reserves	50,721	39,064
Retained earnings	315,334	256,834
Profit for the year	62,397	230,910
Total equity	39,632,626	36,867,241
Liabilities		
Total non-current liabilities	6,369,095	7,241,431
Total current liabilities	2,762,989	3,327,866
Total liabilities	9,132,084	10,569,297
Total equity and liabilities	48,764,710	47,436,538

	2018	2017
Revenue	180,129	182,143
Operating costs	(237,018)	(200,506)
Amortisation and depreciation	(24,453)	(21,377)
Net impairment gains	(15,770)	(4,889)
Accruals		
Net financial income	30,809	166,104
Income taxes	128,700	109,435
Profit for the year	62,397	230,910

44. RELATED PARTIES

Transactions with key managers

The general conditions that govern transactions with key managers and the parties related to them are not more favourable than those applied, or that could have been reasonably applied, to similar transactions with managers other than key managers associated with the same entities at market conditions.

	(€'000)	
	2019	2018
Short-term benefits	4,623	4,672
Post-employment benefits	314	307
Termination benefits	0	0
Total	4,937	4,979

In addition to short-term benefits, a variable portion is to be paid in 2020, for an amount not exceeding €1,100 thousand, once checks have been made on whether objectives have been reached.

The key managers did not carry out any transactions, directly or through close family members, with the company or companies controlled directly or indirectly by the latter.

Related party transactions

The main transactions between the company and its related parties, which were all carried out on an arm's length basis, are described below.

	Assets	Liabilities
Subsidiaries		
Bluferries S.r.l.	Trade and other: health services, provision of services, leases, reimbursement of personnel expense, company officers.	Trade and other: ferry services, fuels and lubricants and sundry leases.
Blu Jet S.r.l.	Trade and other: reimbursement for company officers, reimbursement of personnel expense and health services.	Trade and other: ferry services.
Terminali Italia S.r.l.	Trade and other: lease of areas and premises to manage terminals, reimbursement for seconded personnel and company officers.	Trade and other: charges for owned movable property, services (utilities), use of third-party assets (rolling stock), lighting and driving force, buildings used in operations.
Grandi Stazioni Rail S.p.A.	Trade and other: fees to use property, revenue from maintenance, supplies and works. Group reimbursements, recharging of costs for seconded personnel, assistance and transfer of personnel.	Trade and other: expense for failure to vacate some properties, building expense, leases and ancillary charges related to premises. Expense for maintenance of buildings used in operations and contracted services.
Infrarail Firenze S.r.l.	Trade and other: reimbursement for company officers and reimbursement of costs for seconded personnel.	
Associates		
Quadrante Europa S.p.A.	Trade and other: company officers. Financial: shareholder loan.	-
Parents		
Ferrovie dello Stato Italiane S.p.A. (a)	Trade and other: sundry services, personnel services, training, health services and leases. Financial: interest income on VAT credit and intragroup current account.	Trade and other: licences to use the trademark, seconded personnel, leases and ancillary charges related to premises, building expenses, information services, labour lawyer, finance area, external relations and institutional affairs. Recruitment and development services, professional training and consultancy. Financial: non-financial fees, interest expense on intragroup current account, bank and postal commissions
Other related companies		

Centostazioni Retail S.p.A.	Trade and other: repurchase instalment.	Trade and other: building maintenance.
Sita S.p.A. in liquidation	Trade and other: leases.	-
Ferservizi S.p.A. (b)	Trade and other: lease of buildings used in operations, health services and reimbursement for company officers, cleaning services and recharging of utility costs.	Trade and other: global service provider activities, IT services, administrative services, personnel management, training, accounting and treasury services, procurement services, facilities, railway hotels, administrative management of catering, seconded personnel costs and building expenses.
Italcertifer ScpA (b)	Trade and other: health services, leases, use of GSM-R, reimbursement for testing, certification and consultancy. Recharging of cleaning costs.	Trade and other: preliminary activities and investigations for the certification of components and railway systems and rolling stock maintenance.
Mercitalia Logistics S.p.A. (b)	Trade and other: use of GSM, health services, works and supplies.	Trade and other: freight transport, seconded personnel, leases and ancillary charges.
Mercitalia Transport & Services S.r.l.	Trade and other: health services.	Trade and other: freight transport and shipping.
Mercitalia Rail S.r.l.	Trade and other: leases of buildings used and not used in operations, leases of land, revenue from use of GSM, services provided to the railway companies (sale of energy, ferry services and electrical energy used for traction), health services, revenue from works and supplies and performance regime penalty income.	Trade and other: transport and shipping services, rolling stock maintenance, carriage hire, contracting services, group contractual penalties and performance regime penalty expense.
Mercitalia Shunting & Terminal (formerly Serfer S.p.A.)	Trade and other: leases of buildings used and not used in operations, leases of land, revenue from use of GSM, services provided to the railway companies (sale of energy, electrical energy used for traction), health services, revenue from works and supplies, professional training and fees. Performance regime penalty income.	Trade and other: rolling stock maintenance, third party services, transport services and performance regime penalty expense.
Fercredit S.p.A. (b)	Trade and other: health and other services; accrual to the risk provision.	Trade and other: supplier analyses. Financial: default interest.
Italferr S.p.A. (b)	Trade and other: health services, group repayments, leases of buildings used in operations, professional training and revenue from the use of GSM-R.	Trade: network investment works oversight, design and control and training courses.
Metropark S.p.A.	Trade and other: lease of buildings and areas, reimbursement for seconded personnel, health services and revenue from supplies and services.	Trade and other: seconded personnel services, contracted services.
Mercitalia Intermodal S.p.A. (formerly Cemate S.p.A.)	Trade: leases of freight terminals and health and other services.	Financial: financial expense (prior year items).
Grandi Stazioni Immobiliare S.p.A. (b)	-	Trade and other: lease and building expense.
Trenitalia S.p.A. (b)	Trade and other: fees, traction, ferry and shunting services, health services, reimbursement of Polfer (railway police) charges, leases, use of GSM, sale of high-voltage electrical energy, land leases, traffic-related services, supplies and services and performance regime penalty income.	Trade and other: transport services for employees for work and leisure, carriage hire, purchase and maintenance of rolling stock, shunting and freight transport services, travel and seconded personnel expenses, other services and performance regime penalty expense.
TX Logistik AG	Trade and other: fees, traction, shunting and traffic-related services, freight terminal leases, health services and professional training; performance regime penalty income.	Trade and other: performance regime penalty expense.
TX Logistik GmbH	Trade and other: services provided to the railway companies (fees and shunting services).	-
TX Austria GmbH	Trade and other: services provided to the railway companies (fee).	-
Thello Sas	Trade and other: health services.	-
FS Sistemi Urbani S.r.l. (b)	Trade and other: provision of works, services and supplies, health services and sundry reimbursements for company officers.	Trade and other: leases and ancillary charges related to premises, costs for seconded personnel.

Trenord S.r.l.	Trade and other: fees, traction and shunting services, health services, revenue from the use of GSM, sale of HV energy, traffic-related services, leases, services and supplies, performance regime penalty income.	Trade and other: performance regime penalty expense.
BUSITALIA - Sita Nord (b)	Trade and other: health services, revenue from the use of GSM-R and performance regime penalty income, traffic-related services and leases.	Trade and other: leases and board of directors' fees.
BUSITALIA - Campania S.p.A. (b)	Trade and other: health services, leases and land leases.	-
BUSITALIA Rail Service	Trade and other: health services, leases for vehicle parking areas.	Trade and other: services, transport and shipping costs.
Busitalia Veneto S.p.A.	Trade and other: health and other services.	-
Busitalia Simet	Trade and other: services.	-
SITAF S.p.A.	Trade and other: level crossings and special accesses.	Trade and other: road tolls for vehicles.
SITALFA S.p.A.	Trade and other: level crossings and special accesses.	-
ATAF Gestioni S.r.l.	Trade and other: health and other services.	-
FS Technology S.p.A.	Trade and other: health and other services. Recharging of costs for seconded personnel.	Trade: IT services.
Ferport S.r.l. in liquidation	Trade and other: health services.	-
Terminal Alptransit	Trade and other: group repayments.	-
Ferrovie Sud Est S.r.l. (b)	Trade and other: health services, professional training, revenue from services, works and supplies.	Trade and other: seconded personnel services.
ANAS Group	Trade and other: services, work and supplies; level crossings and special accesses.	Trade and other: contracted services.
Associates of subsidiaries		
BBT S.p.A.	Trade and other: reimbursement for company officers and seconded personnel, leases, level crossings and accesses to railway companies, sundry services and supplies.	Trade and other: seconded personnel services.
Terminal Tremestieri S.r.l.	Trade and other: company officers.	-
Group associates		
Eurogateway S.r.l.	Trade and other: traffic-related services and GSM-R users.	-
LI-NEA S.p.A.	Trade and other: health and other services.	-
FNM S.p.A.	Trade: health services.	-
Other related parties		
CDDPP Group	Trade and other: high-voltage network maintenance, level crossings and special accesses, network operation and remote control; lease payments.	Trade and other: lighting and driving force, processing for third parties and electrical energy for train traction, utilities. Financial: loans.
ENEL group	Trade and other: leases, land leases, level crossings and special accesses. Financial: interest on guarantee deposits.	Trade and other: utilities (water, energy, gas), lighting and driving force and electrical energy for train traction. Financial: interest and default interest with third parties.
ENI group	Trade and other: level crossings and special access; leases for land and areas used in operations; fees for work on connecting tracks.	Trade and other: gas utilities and fuel, use of vehicles and service trucks. Financial: interest and default interest with third parties.
Leonardo group	Trade and other: leases, level crossings and special access, use of GSM-R, penalties and default interest	Trade and other: line maintenance and services for processing for third parties; professional training.
GSE group	-	Trade and other: electrical energy for train traction, lighting and driving force and energy utilities.
Invitalia group	Trade and other: level crossings and special access and services for processing for third parties.	-

IstPolZeccaStato group	-	Trade and other: purchases of spaces for legal notices, advertising and events.
Poste Italiane group	Trade and other: leases of buildings and owner-occupied properties and land lease. Financial: current accounts.	Trade and other: postal charges and sundry services.
RAI group	Trade and other: leases, level crossings and special access.	Trade and other: leases.
SOGIN group	Trade and other: level crossings and special access.	-
EUROFER/PREVINDAI pension funds	-	Trade and other: withholdings and social security contributions.
Other pension funds	-	Trade and other: insurance policies, social security charges and legal fees.
CONSAP S.p.A.	-	Trade and other: issue of Bunker Oil certificates.
Fondazione FS	Trade and other: leases, land leases, health and other services.	Trade and other: donations.
Ferrovie Nord Milano's subsidiaries	Trade and other: health and other services, level crossings and special access.	Trade and other: use of third party assets.
Scarl, associations, EEIG, partnerships	Trade and other: recharging of services	Trade and other: membership fees

(a) Company carrying out management and coordination activities (direct parent)
(b) Company managed and coordinated by (a)

Related party transactions

The table below summarises the statement of financial position and income statement balances as at and for the year ended 31 December 2019 generated by related party transactions.

Financial transactions between the parent and its related parties are shown separately, i.e., without offsetting positive against negative components, although these components refer to similar transactions (e.g., repayments).

Consequently, the figures presented do not necessarily coincide with those set out in the corresponding tables of the notes to the financial statements.

Trade and other transactions

	31 December 2019			2019	
	Assets	Liabilities	Guarantees	Costs	Revenue
Subsidiaries	11,790	19,222	-	89,426	14,201
Blufferies S.r.l.	331	87	-	3,327	293
Blu Jet S.r.l.	60	-	-	7,249	89
Terminali Italia S.r.l.	5,398	2,296	-	1,430	1,662
Grandi Stazioni Rail S.p.A.	5,964	16,838	-	77,441	12,141
Infrarail Firenze S.r.l.	37	-	-	(21)	16
Associates	32	-	-	-	32
Quadrante Europa S.p.A.	32	-	-	-	32
Parents	31,551	22,791	1,638,659	30,380	4,789
Ferrovie dello Stato S.p.A.	31,551	22,791	1,638,659	30,380	4,789
Other related companies	388,192	630,090	-	198,998	1,229,479
Centostazioni Retail S.p.A.	-	-	-	-	787
Sita S.p.A. in liquidation	67	2	-	-	-
Ferservizi S.p.A.	2,030	19,934	-	65,641	1,110
Italcertifer ScpA	508	1,800	-	313	635
Mercitalia Logistics S.p.A.	2,640	2,046	-	544	40
Mercitalia Intermodal (formerly CEMAT)	1,202	411	-	-	19
Mercitalia Rail S.r.l.	33,772	81,349	-	13,349	69,912
Mercitalia Shunting & Terminal (formerly Serfer)	5,355	12,161	-	7,436	1,183
Mercitalia Transport & Services S.r.l.	-	(2)	-	(47)	-
Fercredit S.p.A.	15	248,449	-	211	27
Italferr S.p.A.	3,320	184,572	-	526	582
Metropark S.p.A.	776	135	-	187	701
Grandi Stazioni Immobiliare S.p.A.	-	309	-	608	-
Trenitalia S.p.A.	266,626	54,397	-	79,419	1,025,409
TX Logistik AG	1,431	1,798	-	180	3,438
TX Austria GmbH	52	-	-	-	43
Thello	4	-	-	-	8

FS Sistemi Urbani S.r.l.	6,296	1,507	–	3,343	1,835
Trenord S.r.l.	36,940	1,934	–	1,717	109,408
BUSITALIA Sita Nord S.r.l.	580	33	–	33	941
BUSITALIA Campania S.p.A.	10	–	–	–	127
BUSITALIA Rail Service	8	18	–	26	26
Busitalia Veneto S.p.A.	72	–	–	–	194
Busitalia Simet	15	–	–	–	–
SITAF S.p.A.	27	48	–	4	32
ATAF Gestioni S.r.l.	77	–	–	–	356
Sitalfa S.p.A.	1	1	–	–	–
TELT Sas	–	1,215	–	–	–
Ferport S.r.l. in liquidation	27	–	–	–	–
FSE S.r.l.	20,382	1,529	–	(1,519)	10,069
ANAS Group	5,906	1,057	–	1	2,592
FS Technology S.p.A.	53	15,389	–	27,025	3
Associates of subsidiaries	2,366	61	–	(1,196)	2,908
BBT S.p.A.	2,365	57	–	(1,196)	2,907
Terminal Tremestieri S.r.l.	1	–	–	–	1
La Spezia Shunting Railways S.p.A.	–	4	–	–	–
Group associates	12	–	–	–	264
Eurogateway S.r.l.	1	–	–	–	231
F.N.M. Autoservizi S.p.A.	1	–	–	–	–
LI-NEA S.p.A.	10	–	–	–	33
Other related parties	154,571	218,823	191,862	513,527	14,671
CDDPP Group	8,631	100,557	24,510	77,902	10,985
ENEL group	150,632	150,908	17,245	78,571	1,072
ENI group	551	2,467	108	2,984	495
Leonardo group	132	40,447	–	336	159
GSE group	(2)	209	150,000	340,434	(2)
Invitalia group	(19)	909	–	–	50
IstPolZeccaStato group	1	57	–	370	–
Poste Italiane group	374	11	–	–	475
ENAV group	14	4	–	–	–
RAI group	14	5	–	2	10
SOGIN group	4	3	–	–	1
EXPO group	5	–	–	–	–
EUROFER/PREVINDAI pension funds	4	(3,656)	–	7,113	–
Other pension funds	(6,801)	(74,453)	–	965	–
CONSAP S.p.A.	–	–	–	1	–
Fondazione FS	524	1,013	–	3,709	580
Ferrovie Nord Milano's subsidiaries	117	63	–	10	294
Scarl, associations, EEIG, partnerships	390	280	–	1,131	553
TOTAL	588,514	890,988	1,830,522	831,136	1,266,345

1) Individual investees of the MEF, as per the list above, are considered within their own group and added to other related parties pertaining to the same group. For example, any relations with TERNA shall be added to other relations with companies of the same group under the caption: Cassa Depositi e Prestiti S.p.A. Group (CDDPP)

2) Any negative amounts, where present, reflect balances that are not offset.

Financial transactions

	31 December 2019			2019	
	Assets	Liabilities	Guarantees	Expense	Income
Associates	265	–	–	–	–
Quadrante Europa S.p.A.	265	–	–	–	–
Parents	99,981	2,970,830	140,131	29,626	12
Ferrovie dello Stato Italiane S.p.A.	99,981	2,970,830	140,131	29,626	12
Other related companies	–	7,979	–	278	145
FS Sistemi Urbani	–	3,513	–	74	–
Trenitalia S.p.A.	–	3,686	–	46	–
Mercitalia Logistics	–	780	–	17	–
Mercitalia Shunting & Terminal (formerly Serfer)	–	–	–	–	–
Fercredit S.p.A.	–	–	–	141	–
Centostazioni Retail S.p.A.	–	–	–	–	145
Other related parties	–	–	–	–	–
Poste Italiane group	2,313	–	–	–	–
CDDPP group	–	86,094	–	–	–
Enel group	–	–	–	2	–
TOTAL	102,559	3,064,902	140,131	29,906	157

1) Individual investees of the MEF, as per the list above, are considered within their own group and added to other related parties pertaining to the same group. For example, any relations with TERNA shall be added to other relations with companies of the same group under the caption: Cassa Depositi e Prestiti S.p.A. Group (CDDPP)

45. GUARANTEES

(€'000)

Guarantees	31 December 2019	31 December 2018
1. RISKS		
1.1 Sureties	207,146	253,622
Total 1	207,146	253,622
2. OTHER		
2.1 Sureties issued by third parties in favour of the company	4,687,208	4,786,580
Total 2	4,687,208	4,786,580

Risks mainly refer to the sureties that RFI issued to the public administrations (the Ministry of the Environment, regions and provinces) affected by the laying of HS/HC lines.

Sureties issued in favour of the company mainly refer to guarantees issued by Ferrovie dello Stato Italiane on behalf of RFI in favour of third parties (the tax authorities for VAT credit, GSE for energy, etc.) and guarantees given in favour of the company by the general contractor, contracting bodies and suppliers.

46. THIRD-PARTY FINANCIAL COMMITMENTS

Developments at 31 December 2019 in the captions related to commitments undertaken by bodies including the government and the EU in favour of the company following the issue of loans, in the form of share capital increases or sundry contributions, are shown below:

Investments financed by the Government and the EU between 1993 and 2019:

	Available resources	Disbursements	Recognised assets	Recognised	Amounts to be received from the Government and the EU for investments to be made	Residual amounts for loans and borrowings received and not yet used
At 31 December 2018	123,076,782	77,209,233	7,290,565	76,012,903	38,576,984	1,196,330
At 31 December 2019	130,689,243	80,775,465	7,125,770	80,261,439	42,788,008	514,026
Delta	7,612,461	3,566,232	(164,795)	4,248,536	4,211,024	(682,304)

Specifically, total available resources considered at 31 December 2019 amount to approximately €131 billion. This amount includes financing considered "on an accruals basis" pursuant to several Budget Acts and those pursuant to ad hoc legislative measures as well as the resources from the European Union. Available resources rose €7,612,461 thousand on 31 December 2018 due to the new financing granted to the company in 2019. At 31 December 2019, the disbursements received in respect of the allocations indicated above amount to €80,775,465 thousand and include total disbursements from public sources provided by the different Budget Act and long-term financing laws, as well as EU funds.

At 31 December 2019, disbursements of €80,261,439 thousand were recognised, up €4,248,536 thousand on the previous year, due to the amounts recognised during the year in respect of the above disbursements.

Assets recognised in respect of the allocations were included under Available resources and amount to €7,125,770 thousand. They include assets recognised following the amendment to the criterion used to disburse government resources for investments, previously accounted for as share capital increases and now as grants related to assets pursuant to article 1.86 of the 2006 Finance Act, due from the MEF and the MIT for disbursements arising from Finance Acts and long-term financing laws, not yet disbursed.

47. Disclosure required by Law no. 124/2017

The disclosure required by article 1.125 and 126 of Law no. 124/2017 is provided below and in other sections of this document.

The financial figures refer to cash inflows and outflows for 2019.

The following table provides the disclosure required by article 1.125 of Law no. 124/2017 about 2019:

		2019
MEF	Grants related to assets	3,152,115,967.59
MIT	Grants related to assets	402,899,547.37
EU	Grants related to assets	149,935,729.26
Local bodies	Grants related to assets	330,043,804.81
Other	Grants related to assets	54,560,057.67
MEF	Grants related to income	1,015,556,790.96
MIT chap 1274 - Freight railway transport incentives	Pass-through grants*	99,905,000.00
CSEA	Pass-through grants*	335,429,596.64
Fondimpresa	Financing for training (article 31)	1,395,048.19

(*) railway companies are the ultimate beneficiaries of the pass-through grants (MIT chap. 1274 – CSEA).

The following table provides the disclosure required by article 1.126 of Law no. 124/2017 about 2019:

Euros

Beneficiary		2019
Fondazione FS italiane	Grant	3,000,000
Associazione Nazionale DLF	Grant	1,209,231
Municipalities	Agreements	851,727
Ministry of environment	Grant	1,082,436
ART and Fondazione Politecnico	Membership fees	867,055

48. EVENTS AFTER THE REPORTING DATE

February

Lodi railway accident

On 6 February 2020, there was a railway accident near Ospedaletto Lodigiano (Lodi) involving Frecciarossa train no. 9595 - operating the commercial service on the section between Milan and Salerno - which caused the death of the two train drivers and injured approximately 30 passengers. Reference should be made to Litigation and disputes in the directors' report for details.

COVID-19 outbreak

After the end of the year, the outbreak of a novel coronavirus, COVID-19, was widely reported in January 2020. The epidemic rapidly spread to many other countries around the world, leading the World Health Organisation to define it a "pandemic".

Italy is currently one of the countries hardest hit and this has put extreme pressure on the country's healthcare system, with the government authorities consequently issuing a series of measures to contain the risk of further infection spreading throughout the population.

The COVID-19 emergency will ostensibly affect the regular, ordinary performance of the business activities, despite the mitigation actions that it has already taken or is taking for the primary purpose of ensuring production continuity while protecting its workers' health and safety.

As COVID-19 spread in Italy in the first few months of 2020, the transport market recorded significant overall drops in passenger volumes. During the initial stage of the emergency, the company maintained its normal operating schedule as it waited to see how the situation would evolve, thereby ensuring all normal transport services for passengers and freight. However, as the current situation persists and following the consequent legislative measures and other restrictions that have become necessary and additional measure that may be implemented to mitigate the emergency, the company will need to consider taking decisions regarding traffic outside the current operation of the infrastructure network.

At present, it can be assumed that Covid-19 may have an impact primarily on the following business segments:

- infrastructure access services;
- investing activities, specifically work site in progress;
- management of railway stations;
- health services;
- and, in general, all sectors characterised by activities involving a high presence of staff and travellers.

The company is conducting a broad and extensive analysis of the reorganisation of the services to access the infrastructure and the other railway services for passenger and freight transport by the railway companies to reflect the diminished demand described above. It cannot currently rule out the need for the selective, temporary suspension of partial, targeted sections of its operations in certain units at operating and maintenance sites where it is impossible for workers to work remotely.

In order to ensure that this situation does not alter the company's current, confirmed medium and long term prospects of a strong performance, management is constantly monitoring developments in the emergency. This will, as soon as these developments make it possible, enable management to accurately quantify the possible impact of COVID-19 and, at the same time, identify, with equal accuracy, the possible targeted actions to spur recovery, including on the basis of exceptional measures taken by the Italian and European authorities deeply focused on preparing aid packages for production companies and businesses.

ALLOCATION OF PROFIT FOR THE YEAR

The financial statements as at and for the year ended 31 December 2019 show a profit for the year of €301,933,002.65.

The board of directors proposes allocating 5% of the profit for 2019, amounting to €15,096,650.13, to the legal reserve and the residual €286,836,352.52 to retained earnings.

Rome, 4 March 2020

The board of directors

The Chairwoman

The CEO